

Contributions to Mineralogy and Petrology

General index:

Volumes 76 (1981)–100 (1988)

Edited by W. Smykatz-Kloss

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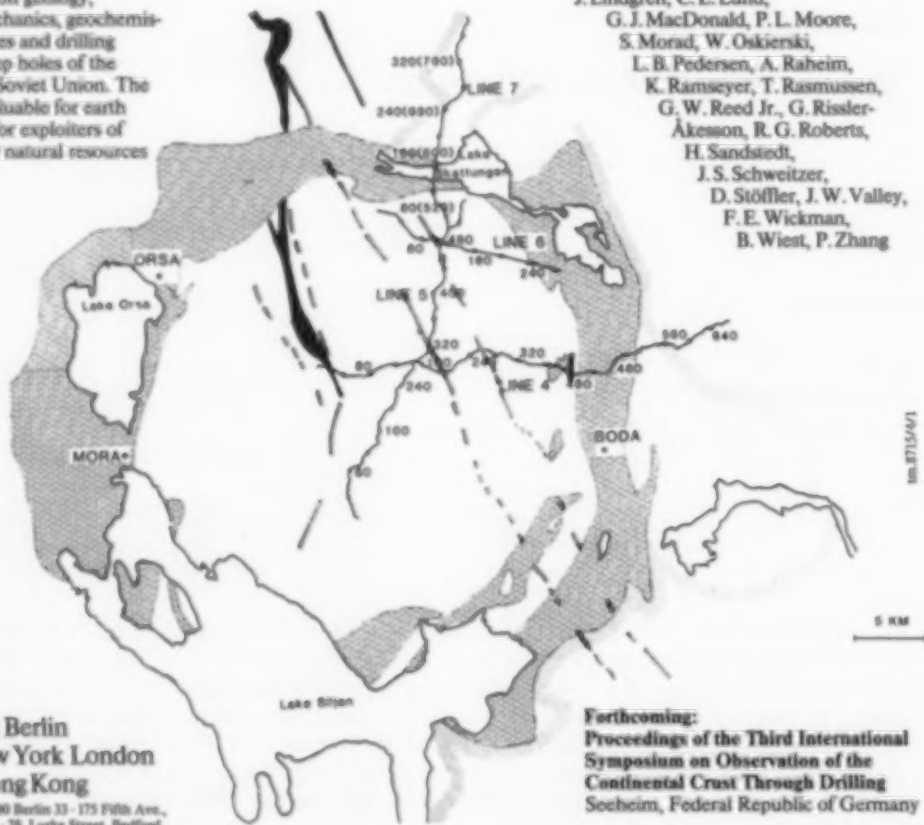
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- Bhattacharya A → Paria P (1986) 99:126
- Bhattacharya A → Sen SK (1984) 88:64
- Bhattacharya PK, Dasgupta S, Fukuoka M, Roy S (1984) Geochemistry of braunite and associated phases in metamorphosed non-calcareous manganese ores of India 87:65
- Bibee LD → Stern RJ (1984) 86:159
- Bickle MJ, Bettenay LF, Barley ME, Chapman HJ, Groves DJ, Campbell IH, Laeter JR de (1983) A 3500 Ma Plutonic and Volcanic Calc-Alkaline Province in the Archean East Pilbara Block 84:25
- Bickle MJ, McKenzie D (1987) The transport of heat and matter by fluids during metamorphism 95:384-392
- Bickle MJ, Wickham SM, Chapman HJ, Taylor HP Jr (1988) A strontium, neodymium and oxygen isotope study of hydrothermal metamorphism and crustal anatexis in the Trois Seigneurs Massif, Pyrenees, France 100:399-417
- Bigazzi G, Del Moro A, Macera P (1986) A quantitative approach to trace element and Sr isotope evolution in the Adamello batholith (northern Italy) 94:46-53
- Biggar GM (1983) Re-Assessment of Phase Equilibria Involving Two Liquids in the System $\text{K}_2\text{O-Al}_2\text{O}_3\text{-FeO-SiO}_2$ 82:274
- Binsted N, Greaves GN, Henderson CMB (1985) An EXAFS study of glassy and crystalline phases of compositions $\text{CaAl}_2\text{Si}_2\text{O}_8$ (anorthite) and $\text{CaMgSi}_2\text{O}_8$ (diopside) 89:103-109
- Bird DK → Manning CE (1986) 92:437-447
- Bishop FC → Adams GE (1986) 94:230-237
- Bishop FC → Vanko DA (1982) 81:277
- Black LP, Fitzgerald JD, Harley SL (1984) Pb isotopic composition, colour, and microstructure of monazites from a polymetamorphic rock in Antarctica 85:141
- Black LP, Williams IS, Compston W (1986) Four zircon ages from one rock: the history of a 3930 Ma-old granulite from Mount Sones, Enderby Land, Antarctica 94:427-437
- Black LP → Higgins NC (1986) 92:248-259
- Black LP → Sheraton JW (1981) 78:305
- Black LP → Williams IS (1984) 88:322
- Black PM → Itaya T (1985) 91:151-162
- Blair BB → Kerrich R (1987) 95:481-498
- Blair BB → Kerrich R (1986) 100:555-559
- Blake S, Campbell IH (1986) The dynamics of magma-mixing during flow in volcanic conduits 94:72-81
- Blanchard DP → Dungan MA (1983) 82:131
- Blanckenburg F von, Villa IM (1988) Argon retentivity and argon excess in amphiboles from the garbenschiefs of the Western Tauern Window, Eastern Alps 100:1-11
- Blenkinsop J → Wen J (1987) 97:433-437
- Bloomer SH, Hawkins JW (1987) Petrology and geochemistry of boninite series volcanic rocks from the Mariana trench 97:361-377
- Bloss FD → Armbruster T (1981) 77:332
- Böckner NZ, Boyd FR (1981) Oxide Minerals in a Layered Kimberlite-Carbonate Sill from Benfontein, South Africa 76:253
- Böckner NZ → Boyd FR (1984) 86:119
- Bodinier J, Dupuy C, Dostal J (1984) Geochemistry of Precambrian ophiolites from Bou Azzer, Morocco 87:43
- Bodinier JL, Dupuy C, Dostal J, Carme F (1981) Geochemistry of Ophiolites from the Chamrousse Complex (Belledonne Massif, Alps) 78:379
- Bodinier JL → Leyreloup A (1982) 79:68
- Boettcher A, Luth RW, White BS (1987) Carbon in silicate liquids: the systems $\text{NaAlSi}_3\text{O}_8\text{-CO}_2$, $\text{CaAl}_2\text{Si}_2\text{O}_8\text{-CO}_2$, and $\text{KAISi}_3\text{O}_8\text{-CO}_2$ 97:297-304
- Boettcher AL → Bohlen SR (1983) 83:52
- Boettcher AL → Bohlen SR (1983) 83:270
- Bogoch R, Magaritz M (1983) Immiscible Silicate-Carbonate Liquids as Evidenced from Ocellar Diabase Dykes, Southeast Sinai 83:227
- Bohlen SR, Boettcher AL, Wall VJ, Clemens JD (1983) Stability of Phlogopite-Quartz and Sanidine-Quartz: A Model for Melting in the Lower Crust 83:270
- Bohlen SR, Wall VJ, Boettcher AL (1983) Experimental Investigation and Application of Garnet Granulite Equilibria 83:52
- Bohlen SR → Johnson CA (1983) 84:191
- Bohlen SR → Nabelek PI (1987) 97:66-71
- Bohlen SR → Powers RE (1985) 90:401-409
- Bohrson WA, Clague DA (1988) Origin of ultramafic xenoliths containing exsolved pyroxenes from Hualalai Volcano, Hawaii 100:139-155
- Bolvin P, Camus G (1981) Igneous Scapolite-Bearing Associations in the Chaîne des Puy, Massif Central (France) and Atakor (Hoggar, Algeria) 77:365
- Bolvin P → Liotard JM (1988) 98:81-90
- Bonef M → Haack U (1984) 85:116
- Borba GS → Long LE (1986) 92:341-350
- Bossière G → Marchand J (1982) 79:439
- Boullier AM → Lancelot JR (1983) 82:312
- Bowling GP → Condie KC (1986) 92:93-103

- Bowman JR → Menaing TM (1984) 87:101
- Bowser CJ → Spencer RJ (1984) 86:321
- Boyd FR, Nixon PH, Bector NZ (1984) Rapidly crystallized garnet pyroxenite xenoliths possibly related to discrete nodules 86:119
- Boyd FR → Bector NZ (1981) 76:253
- Bradshaw JY → Mattinson JM (1986) 92:383-392
- Bradshaw JY → McCulloch MT (1987) 97:183-195
- Brandeis G, Jaupart C (1987) The kinetics of nucleation and crystal growth and scaling laws for magmatic crystallization 96:24-34
- Braun E, Raith M (1985) Fe-Ti-oxides in metamorphic basites from the Eastern Alps, Austria: a contribution to the formation of solid solutions of natural Fe-Ti-oxide assemblages 90:199-213
- Bray EA, du (1988) Garnet compositions and their use as indicators of peraluminous granitoid petrogenesis - south-eastern Arabian Shield 100:205-212
- Brearley M, Scarle CM, Fujii T (1984) The petrology of ultramafic xenoliths from Summit Lake, near Prince George, British Columbia 88:53
- Brearley M → Dingwell DB (1985) 90:29-35
- Breemen O van → Davidson A (1988) 100:291-299
- Brey G → Nickel KG (1984) 87:35
- Brey GP, Nickel KG, Kogarko L (1986) Garnet-pyroxene equilibria in the system $\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ (CMAS): prospects for simplified ('T-independent') isotherm barometry and an eclogite-barometer 92:448-455
- Brey GP → Nickel KG (1985) 91:44-53
- Bridgwater D → Nutman AP (1984) 87:24
- Bridgwater D → Nutman AP (1986) 94:137-148
- Bridgwater D → Patchett PJ (1984) 87:311
- Bridgwater D → Springer N (1983) 82:28
- Briggs RM, Golev GG (1984) Petrological and trace element geochemical features of the Okete Volcanics, western North Island, New Zealand 86:77
- Briot D → Liotard JM (1988) 98:81-90
- Briqueu L → Dautria JM (1987) 95:133-144
- Briqueu L → Pichavant M (1988) 100:325-338
- Brophy JG (1986) The Cold Bay Volcanic Center, Aleutian Volcanic Arc. I. Implications for the origin of High-Alumina Arc Basalt 93:365-380
- Brophy JG (1987) The Cold Bay Volcanic Center, Aleutian Volcanic Arc. II. Implications for fractionation and mixing mechanism in calcalkaline andesite genesis 97:375-388
- Brothers RN, Yokoyama K (1982) Comparison of the High-Pressure Schist Belts of New Caledonia and Sanbagawa, Japan 79:219
- Brothers RN → Raza T (1985) 91:151-162
- Brown EH, O'Neill JR (1982) Oxygen Isotope Geothermometry and Stability of Lawsonite and Pumpellyite in the Shuksan Suite, North Cascades, Washington 80:240
- Brown PE, Becker SM (1986) Fractionation, hybridisation and magma-mixing in the Kialineq centre, East Greenland 92:57-70
- Brown PE, Essene EJ (1985) Activity variations attending tungsten skarn formation, Pine Creek, California 89:358-369
- Brown PE → Isaacs AM (1981) 77:115
- Brown PE → Lamb WM (1987) 96:485-495
- Brown TH → Berman RG (1985) 89:165-183
- Brown WL, Becker SM, Parsons I (1983) Cryptoperthites and Cooling Rate in a Layered Syenite Pluton: A Chemical and TEM Study 82:13
- Brown WL, Macaudière J (1986) Mechanical twinning of plagioclase in a deformed meta-anorthosite - the production of M-twinning 92:44-56
- Brown WL, Parsons I (1981) Towards a More Practical Two-Feldspar Geothermometer 76:369
- Brown WL, Parsons I (1984) Exsolution and coarsening mechanisms and kinetics in an ordered cryptoperthite series 85:3
- Brown WL, Parsons I (1984) The nature of potassium feldspar, exsolution microtextures and development of dislocations as a function of composition in perthitic alkali feldspars 86:335
- Brown WL, Parsons I (1986) Zoned ternary feldspars in the Klokken intrusion: exsolution microtextures and mechanisms 96:444-454
- Brown WL → Macaudière J (1985) 89:39-51
- Brown WL → Moreau C (1987) 95:32-43
- Brown WL → Parsons I (1983) 82:1
- Brown WL → Parsons I (1988) 98:431-443
- Bruckmann-Benke P, Chatterjee ND, Akshuk AM (1988) Thermodynamic properties of $\text{Zn}(\text{Al}, \text{Cr})_2\text{O}_4$ spinels at high temperatures and pressures 98:91-95
- Brueckner HK → Mahburg Kay S (1983) 82:99
- Bruno E → Benna P (1981) 78:272
- Bruno E → Benna P (1985) 90:361-365
- Bryan WB (1983) Systematics of Modal Phenocryst Assemblages in Submarine Basalts: Petrologic Implications 83:62
- Bryan WB → Grove TL (1983) 84:293
- Bryan WB → Staudigel H (1981) 78:255
- Bryan WB → Tormey DR (1987) 96:121-139
- Bucher-Nurminen K (1987) A recalibration of the chlorite - biotite - muscovite geobarometer 96:519-522
- Bucher-Nurminen K, Droop G (1983) The metamorphic evolution of garnet-cordierite-sillimanite-gneisses of the Grut-Complex, Eastern Pennine Alps 84:215
- Bulletti M → Stille P (1987) 96:140-150
- Bullen T → Dick HJB (1984) 86:54
- Burger AJ → Clifford TN (1981) 77:225
- Burkhard DJM, O'Neill JR (1988) Contrasting serpentinization processes in the eastern Central Alps 99:498
- Burkhard M, Kerrich R (1988) Fluid regimes in the deformation of the Helvetic nappes, Switzerland, as inferred from stable isotope data 99:416
- Burnham CW → Eggler DH (1984) 85:58
- Burt DM → Christiansen EH (1983) 83:16
- Buseck PR → Otten MT (1987) 96:529-538
- Byerly G → Muehlenbachs K (1982) 79:76
- Cabanes N, Mercier J-CC (1988) Insight into the upper mantle beneath an active extensional zone: the spinel-peridotite xenoliths from San Quintin (Baja California, Mexico) 100:374-384
- Cabanes N → Dautria JM (1987) 95:133-144
- Cameron KL, Cameron M (1985) Rare earth element, $^{87}\text{Sr}/^{86}\text{Sr}$, and $^{143}\text{Nd}/^{142}\text{Nd}$ compositions of Cenozoic orogenic dacites from Baja California, northwestern Mexico, and adjacent west Texas: evidence for the predominance of subcrustal component 91:1-11
- Cameron M → Cameron KL (1985) 91:1-11
- Cameron WE (1985) Petrology and origin of primitive lavas from the Troodos ophiolite, Cyprus 89:239-255
- Cameron WE → Crawford AJ (1985) 91:93-104
- Cameron WE → Kyser TK (1986) 93:222-226
- Cameron WE → Walker DA (1983) 83:150
- Campbell IH (1985) The difference between oceanic and continental tholeiites: a fluid dynamic explanation 91:37-43
- Campbell IH → Bickle MJ (1983) 84:25
- Campbell IH → Blake S (1986) 94:72-81
- Campbell IH → Martin D (1987) 96:465-475
- Camus G → Bolvin P (1981) 77:365
- Camus G → Condomines M (1982) 1982:296
- Cann JR → Prichard HM (1982) 79:46
- Cao Rong-long, Ross C, Ernst WG (1986) Experimental studies to 10 kb of the bulk composition tremolite-tschermakite + excess H_2O 93:160-167
- Capitani C de, Peters T (1981) The Solvus in the System $\text{MnCO}_3\text{-CaCO}_3$ 76:394
- Capitani C de, Peters T (1982) Corresponding States in Binary Solutions, and Graphical Determination of Margules Parameters 81:48
- Carbonin S → Dal Negro A (1984) 86:221
- Carlson J → Ayuso RA (1984) 88:113
- Carlson WD (1986) Vanadium pentoxide as a high-temperature solvent for

- phase equilibrium studies in $\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ 92:89-92
- Carlson WD (1986) Reversed pyroxene phase equilibria in $\text{CaO}-\text{MgO}-\text{SiO}_2$ from 925° to 1,175° C at one atmosphere pressure 92:218-224
- Carlson WD → Bebout GE (1986) 92:518-529
- Carne F → Bodinier JL (1981) 78:379
- Carne F → Pin C (1987) 96:406-413
- Carmichael DM → Pattison DRM (1982) 79:394
- Carmichael DM → Trzcinski WE Jr (1984) 85:311
- Carmichael ISE → Allan JF (1984) 88:203
- Carmichael ISE → Baldridge WS (1981) 76:321
- Carmichael ISE → Ghiorso MS (1984) 84:107
- Carmichael ISE → Ghiorso MS (1985) 90:121-141
- Carmichael ISE → Kilinc A (1983) 83:136
- Carmichael ISE → Kyser TK (1981) 77:11
- Carmichael ISE → Kyser TK (1982) 81:88
- Carmichael ISE → Kyser TK (1986) 93:120-123
- Carmichael ISE → Luhr JF (1981) 76:127
- Carmichael ISE → Luhr JF (1982) 80:262
- Carmichael ISE → Luhr JF (1985) 90:142-161
- Carmichael ISE → Mysen BO (1985) 90:101-106
- Carmichael ISE → Nelson SA (1984) 85:321
- Carmichael ISE → Sack RO (1984) 85:103
- Carmichael ISE → Sack RO (1987) 96:1-23
- Carmichael ISE → Stebbins JF (1982) 80:276
- Carmichael ISE → Stebbins JF (1984) 86:131
- Carpenter J (1985) Tectonic interpretation of an inverse gradient of zircon fission-track ages with respect to altitude: alpine thermal history of the Gran Paradiso basement 90:74-82
- Carpenter MA (1981) Time-Temperature-Transformation (TTT) Analysis of Cation Disorder in Omphacite 78:433
- Carpenter MA (1981) Omphacite Microstructures as Time-Temperature Indicators of Blueschist- and Eclogite-Facies Metamorphism 78:441
- Carpenter MA, Ferry JM (1984) Constraints on the thermodynamic mixing properties of plagioclase feldspars 87:138
- Carr MJ → Herzberg CT (1983) 84:1
- Carswell DA, Gibb FGF (1987) Evaluation of mineral thermometers and barometers applicable to garnet ilmenite assemblages 95:499-511
- Carswell DA, Gibb FGF (1987) Garnet ilmenite xenoliths in the kimberlites of northern Lesotho: revised $P-T$ equilibration conditions and upper mantle paleogeotherm 97:473-487
- Caruso L, Simmons G (1985) Uranium and microcracks in a 1,000-meter core, Redstone, New Hampshire 90:1-17
- Casey JF → Elthon D (1984) 85:197
- Casey JF → Komor SC (1987) 95:278-300
- Cashman KV, Ferry JM (1986) Crystal size distribution (CSD) in rocks and the kinetics and dynamics of crystallization. III. Metamorphic crystallization 99:401
- Cashman KV, Marsh BD (1988) Crystal size distribution (CSD) in rocks and the kinetics and dynamics of crystallization. II. Makaopuhi lava lake 99:292
- Cathelineau M, Izquierdo G (1988) Temperature-composition relationships of authigenic micaceous minerals in the Los Azufres geothermal system 100:418-428
- Cathelineau M, Nieva D (1985) A chlorite solid solution geothermometer. The Los Azufres (Mexico) geothermal system 91:235-244
- Cattell A, Arndt N (1987) Low- and high-alumina komatiites from a Late Archaean sequence, Newton Township, Ontario 97:218-227
- Cave MR → Savage D (1987) 96:391-405
- Cawthorn RG, Davies G (1983) Experimental Data at 3 Kbars Pressure on Parental Magma to the Bushveld Complex 83:128
- Chandler GW → Hajash A (1981) 78:240
- Chapman HJ → Bickle MJ (1983) 84:25
- Chapman HJ → Bickle MJ (1988) 100:399-417
- Chappell BW → Collins WJ (1982) 80:189
- Chappell BW → Jaques AL (1983) 82:154
- Chappell BW → Kistler RW (1986) 94:205-220
- Chappell BW → Whalen JB (1987) 95:407-419
- Chase RL → Michael PJ (1987) 96:245-263
- Chatterjee ND, Johannes W, Leistner H (1984) The system $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$: new phase equilibria data, some calculated phase relations, and their petrological applications 88:1
- Chatterjee ND, Terhart L (1985) Thermodynamic calculation of peridotite phase relations in the system $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{Cr}_2\text{O}_3$, with some geological applications 89:273-284
- Chatterjee ND, Warhus U (1984) Ephesite, $\text{Na}(\text{LiAl}_2)(\text{Al}_2\text{Si}_2\text{O}_{10})(\text{OH})_2$: II. Thermodynamic analysis of its stability and compatibility relations, and its geological occurrences 85:80
- Chatterjee ND → Bruckmann-Benke P (1988) 98:91-96
- Chatterjee ND → Flux S (1984) 86:294
- Chatterjee ND → Halbach H (1982) 79:337
- Chatterjee ND → Halbach H (1984) 88:14
- Chatterjee ND → Oka Y (1984) 87:196
- Chatterjee ND → Warhus U (1984) 85:74
- Chen JH → Shaw HF (1987) 96:281-290
- Chiesa S → Poli S (1987) 95:322-335
- Chipera SJ, Perkins D (1988) Evaluation of biotite-garnet geothermometers: application to the English River subprovince, Ontario 96:40-48
- Chipera SJ → Perkins D III (1985) 89:69-80
- Chivas AR (1981) Geochemical Evidence for Magmatic Fluids in Porphyry Copper Mineralization - Part I. Mafic Silicates from the Koloula Igneous Complex 78:389
- Chivas AR → Hendry DAF (1981) 78:404
- Chivas AR → Hendry DAF (1985) 89:317-329
- Cho M, Maruyama S, Liou JG (1987) An experimental investigation of heulandite-laumontite equilibrium at 1000 to 2000 bar $P_{\text{H}_2\text{O}}$ 97:43-50
- Choi WC → Cliff RA (1985) 90:346-352
- Chopin C (1984) Coesite and pure pyrope in high-grade blueschists of the Western Alps: a first record and some consequences 86:107
- Chopin C, Goffé B (1981) High-Pressure Synthesis and Properties of Magnesio-Carpholite, $\text{MgAl}_2(\text{Si}_2\text{O}_6)(\text{OH})_2$ 76:260
- Chopin C, Klaska R, Medenbach O, Dron D (1986) Ellenbergerite, a new high-pressure $\text{Mg}-\text{Al}-(\text{Ti}, \text{Zr})$ -silicate with a novel structure based on face-sharing octahedra 92:316-321
- Chopin C, Maluski H (1982) Unconvincing Evidence Against the Blocking Temperature Concept? A Reply 80:391
- Chopin C, Monié P (1984) A unique magnesiochloritoid-bearing high-pressure assemblage from the Monte Rosa, Western Alps: petrologic and $^{40}\text{Ar}-^{39}\text{Ar}$ radiometric study 87:388
- Choudhuri A → Iyer SS (1984) 85:95
- Christiansen EH, Burt DM, Sheridan MF, Wilson RT (1983) The Petrogenesis of Topaz Rhyolites from the Western United States 83:16
- Christiansen EH → Lee DE (1983) 83:99
- Christie DM, Sinton JM (1986) Major element constraints on melting, differentiation and mixing of magmas from the Galapagos 95° W propagating rift system 94:274-288
- Cigolini C, Kudo AM (1987) Xenoliths in recent basaltic andesite flows from Arrenal Volcano, Costa Rica: inference on the composition of the lower crust 95:361-390
- Civetta L, Innocenti F, Manetti P, Peccerillo A, Poli G (1981) Geochemical Characteristics of Potassic Volcanics from Mts. Ernici (Southern Latium, Italy) 78:37
- Claesson LA → Öhlander B (1987) 95:437-450
- Claesson S (1987) Isotopic evidence for the Precambrian provenance and Caledonian metamorphism of high grade paragneisses from the Svea Nappe, Scandinavian Caledonides. I. Conventional U-Pb zircon and Sm-Nd whole rock data 97:196-204

- Claesson S, Pallister JS, Tatsumoto M (1984) Samarium-neodymium data on two late Proterozoic ophiolites of Saudi Arabia and implications for crustal and mantle evolution 85:244
- Claesson S → Williams IS (1987) 97:205-217
- Clague DA, Dairymple GB (1988) Age and petrology of alkalic postshield and rejuvenated: stage lava from Kauai, Hawaii 99:202
- Clague DA → Bohlen WA (1988) 100:139-155
- Clark AH → Pichavant M (1986) 100:300-324
- Clark AH → Pichavant M (1986) 100:325-338
- Clarke DB, Muecke GK, Pe-Piper G (1983) The Lamprophyres of Ubekendi Eiland, West Greenland: Products of Renewed Partial Melting or Extreme Differentiation? 83:117
- Clauser N, Vidal P, Auvray B (1985) Differential behaviour of the Rb-Sr and K-Ar systems of spilitic flows and interbedded metasediments: the spilitic group of Erquy (Brittany, France). Paleomagnetic implications 89:81-89
- Clauser N → Hunziker JC (1986) 92:157-180
- Clauser N → Hunziker JC (1987) 96:75-77
- Clemens JD, McMillan PF (1982) A Discussion of: "Biotite Melting in High-Grade Metamorphic Gneisses from the Haut-Ailler (French Massif Central)" by Nédélec and Paquet (Discussion) 79:436
- Clemens JD, Wall VJ (1984) Origin and evolution of a peraluminous silicic ignimbrite suite: the Violet Town Volcanics 88:354
- Clemens JD → Bohlen SR (1983) 83:270
- Cliff RA (1981) Pre-Alpine History of the Pennine Zone in the Tauern Window, Austria: U-Pb and Rb-Sr Geochronology 77:262
- Cliff RA, Gray CM, Huhma H (1983) A Sm-Nd isotopic study of the South Harris Igneous Complex, the Outer Hebrides 82:91
- Cliff RA, Jones G, Choi WC, Lee TJ (1985) Strontium isotopic equilibration during metamorphism of tillites from the Ogcheon Belt, South Korea 90:345-352
- Clifford P → Cox KG (1982) 79:268
- Clifford TN, Stumpff EF, Burger AJ, McCarthy TS, Rex DC (1981) Mineral-Chemical and Isotopic Studies of Namaqualand Granulites, South Africa: A Grenville Analogue 77:225
- Clocchiatti R, Massare D (1985) Experimental crystal growth in glass inclusions: the possibilities and limits of the method 99:193-204
- Cohen AS, O'Nions RK, Siegenthaler R, Griffin WL (1988) Chronology of the pressure-temperature history recorded by a granulite terrain 98:303-311
- Colish RA, Rogers NW (1987) Geochemistry of the Boil Mountain ophiolite complex, northwest Maine, and tectonic implications 97:51-65
- Coleman ML → Sveinbjornsdottir AE (1986) 94:99-109
- Collerson KD (1982) Geochemistry and Rb-Sr Geochronology of Associated Proterozoic Peralkaline and Subalkaline Anorogenic Granites from Labrador 81:126
- Collerson KD → Sheraton JW (1984) 87:51
- Collins WJ, Beams SD, White AJR, Chappell BW (1982) Nature and Origin of A-Type Granites with Particular Reference to Southeastern Australia 80:189
- Colucci MT → Davidson JP (1988) 100:429-445
- Comin-Chiaromonte P → Sinigoi S (1983) 82:351
- Compagnoni R → Mellini M (1987) 97:147-155
- Compston W → Black LP (1986) 94:427-437
- Compston W → Kröner A (1986) 99:257
- Compston W → Williams IS (1984) 88:322
- Cordie KC, Allen P, Narayana BL (1982) Geochemistry of the Archean Low-to-High-Grade Transition Zone, Southern India 81:157
- Cordie KC, Bowling GP, Allen P (1986) Origin of granites in an Archean high-grade terrane, southern India 92:93-103
- Condomines M, Morand P, Camus G, Duthou L (1982) Chronological and Geochemical Study of Lavas from the Chaîne des Puys, Massif Central, France: Evidence for Crustal Contamination 1982:296
- Coolen JJM → Hoefs J (1981) 78:332
- Coombs DS → Ahn JH (1988) 99:82
- Cooper JA, Dong YB (1983) Zircon Age Data from a Greenstone of the Archean Yilgarn Block, Australia: Mid Proterozoic Heating or Uplift? 82:387
- Copper JA → Etheridge MA (1981) 78:74
- Copper JA → Ludwig KR (1984) 86:298
- Copperthwaite VE → Barton JM Jr (1987) 97:488-495
- Cordani UG → Iyer SS (1984) 85:95
- Corfu F (1988) Differential response of U-Pb systems in coexisting accessory minerals, Winnipeg River Subprovince, Canadian Shield: implications for Archean crustal growth and stabilization 96:312-325
- Corfu F, Ayres LD (1984) U-Pb age and genetic significance of heterogeneous zircon populations in rocks from the Favourable Lake area, Northwestern Ontario 88:86
- Corriveau L → Woussen G (1981) 76:343
- Cortesogno L, Lucchetti G, Spadea P (1984) Pumpellyite in low-grade metamorphic rocks from Ligurian and Lucanian Apennines, Maritime Alps and Calabria (Italy) 85:14
- Cortini M, Don Hermes O (1981) Sr Isotopic Evidence for a Multi-Source Origin of the Potassic Magmas in the Neapolitan Area (S. Italy) 77:47
- Corwin C → Fodor RV (1985) 91:54-65
- Cotkin SJ (1987) Conditions of metamorphism in an Early Paleozoic blueschist, Schist of Skookum Gulch, northern California 96:192-200
- Cottin JY → Lorand JP (1987) 97:251-263
- Cousens DR → Griffin WL (1988) 99:143
- Coutures J-P → McMillan P (1986) 1986:178-182
- Cox KG, Clifford P (1982) Correlation Coefficient Patterns and Their Interpretation in Three Basaltic Suites 79:268
- Cramer JJ → Nesbitt HW (1981) 78:136
- Crawford AJ, Cameron WE (1985) Petrology and geochemistry of Cambrian boninites and low-Ti andesites from Heathcote, Victoria 91:93-104
- Crawford AJ, Falloon TJ, Eggins S (1987) The origin of island arc high-alumina basalts 97:417-430
- Crawford AJ → Nelson DR (1984) 88:164
- Crawford AJ → Ramsay WRH (1984) 88:366
- Crawford ML → Sisson VB (1981) 78:371
- Crawford ML → Stout MZ (1986) 92:235-247
- Cressey G (1981) Entropies and Enthalpies of Aluminosilicate Garnets 76:413
- Crisp JA, Spera FJ (1987) Pyroclastic flows and lavas of the Mogan and Fataga formations, Tejeda Volcano, Gran Canaria, Canary Islands: mineral chemistry, intensive parameters, and magma chamber evolution 96:503-518
- Crisp RE → Fleck RJ (1985) 90:291-308
- Crook KAW → Bhatia MR (1986) 92:181-193
- Crowe BM → Vaniman DT (1982) 80:341
- Crowley PD, Spear FS (1987) The P-T evolution of the Middle Kili Nappe Complex, Scandinavian Caledonides (68° N) and its tectonic implications 95:512-522
- Cumming GL, Köppel V, Ferrario A (1987) A lead isotope study of the northeastern Ivrea Zone and the adjoining Ceneri zone (N-Italy): evidence for a contaminated subcontinental mantle 97:19-30
- Cundari A, Dal Negro A, Piccirilli EM, Della Giusta A, Secco I (1986) Intracrystalline relationships in olivine, orthopyroxene, clinopyroxene and spinel from a suite of spinel hercynite xenoliths from Mt. Noorat, Victoria, Australia 94:523-532
- Cundari A → Dal Negro A (1984) 86:221
- Cundari A → Dal Negro A (1986) 92:35-43
- Cundari A → Ferguson AK (1982) 81:212
- Cuney M → Barbey P (1982) 81:304
- Cuney M → Negga HS (1986) 93:179-186
- Cuney M → Turpin L (1988) 98:139-147
- Cuney M → Weber C (1985) 90:52-62
- Cunningham GC → Henderson P (1985) 89:263-272
- Currie KL → Whalen JB (1984) 87:319
- Currie KL → Whalen JB (1987) 95:407-419

- Cygan RT, Lasaga AC (1982) Crystal Growth and the Formation of Chemical Zoning in Garnets 79:187
- Dachs E, Metz P (1988) The mechanism of the reaction 1 tremolite + 3 calcite + 2 quartz = 5 diopside + 3 CO₂ + 1 H₂O: results of powder experiments 100:542-551
- Dallmeyer RD, VanBreeman O (1981) Rb-Sr Whole-Rock and ⁴⁰Ar/³⁹Ar Mineral Ages of the Togos and Hallowell Quartz Monzonite and Three Mile Pond Granodiorite Plutons, South-Central Maine: Their Bearing on Post-Acadian Cooling History 78:61
- Dallmeyer RD → Hunziker JC (1986) 92:157-180
- Dallmeyer RD → Hunziker JC (1987) 96:75-77
- Dallmeyer RD → Reuter A (1987) 97:352-360
- Dal Negro A, Carbonin S, Domeneghetti C, Molin GM, Cundari A, Piccirillo EM (1984) Crystal chemistry and evolution of the clinopyroxene in a suite of high pressure ultramafic nodules from the Newer Volcanics of Victoria, Australia 86:221
- Dal Negro A, Cundari A, Piccirillo EM, Molin GM, Uliana D (1986) Distinctive crystal chemistry and site configuration of the clinopyroxene from alkali basaltic rocks. The Nyambeni clinopyroxene suite, Kenya 92:35-43
- Dal Negro A → Cundari A (1986) 94:523-532
- Dal Piaz GV → Venturelli G (1984) 86:209
- Dalrymple GB → Clague DA (1988) 99:202
- Dasgupta S, Banerjee H, Fukuoka M (1985) Oxidation gradients in metamorphosed non-carbonatic manganese formations 90:258-261
- Dasgupta S → Bhattacharyya PK (1984) 87:65
- Dautria JM, Liotard JM, Cabanes N, Girod M, Briquieu L (1987) Amphibole-rich xenoliths and host alkali basalts: petrogenetic constraints and implications on the recent evolution of the upper mantle beneath Ahaggar (Central Sahara, Southern Algeria) 95:133-144
- Dautria JM → Leblanc M (1982) 79:347
- Dautria JM → Girod M (1981) 77:66
- Daval D (1987) Petrogenesis of orthopyroxene-magnetite-ilmenite intergrowths from an ultramafic layer 95:301-310
- Davidson A, Breemen O van (1988) Baddeleyite-zircon relationships in coronitic metagabbro, Grenville Province, Ontario: Implications for geochronology 100:291-299
- Davidson JP, Ferguson KM, Colucci MT, Dungan MA (1988) The origin and evolution of magmas from the San Pedro-Pellado Volcanic complex, S Chile: multicomponent sources and open system evolution 100:429-445
- Davidson PM (1985) Thermodynamic analysis of quadrilateral pyroxenes. Part I: Derivation of the ternary non-convergent site-disorder model 91:383
- Davidson PM, Grover J, Lindsley DH (1982) (Ca, Mg)₂Si₂O₆ Clinopyroxenes: A Solution Model Based on Nonconvergent Site-Disorder 80:88
- Davidson PM, Lindsley DH (1985) Thermodynamic analysis of quadrilateral pyroxenes. Part II: Model calibration from experiments and applications to geothermometry 91:390
- Davidson PM, Mukhopadhyay DK (1984) Ca-Fe-Mg olivines: phase relations and a solution model 86:256
- Davidson PM → Nielsen RL (1988) 100:361-373
- Davies G → Cawthorn RG (1983) 83:128
- Davis MW → Warner RD (1985) 90:386-400
- Dawson JB, Smith JV (1987) Reduced sapphirine granulite xenoliths from the Lacey Kimberlite, South Africa: implications for the deep structure of the Kaapvaal Craton 95:376-383
- Dawson JB, Smith JV (1988) Metasomatised and veined uppermantle xenoliths from Pello Hill, Tanzania: evidence for anomalously-light mantle beneath the Tanzanian sector of the East African Rift Valley 100:510-527
- Dawson JB → Arculus RJ (1984) 85:85
- Day WC, Weiblen PW (1986) Origin of Late Archean granite: geochemical evidence from the Vermilion Granitic Complex of northern Minnesota 93:283-296
- De Fino M, La Volpe L, Peccerillo A, Piccarreta G, Poli G (1986) Petrogenesis of Monte Vulture volcano (Italy): inferences from mineral chemistry, major and trace element data 92:135-145
- Delaloye M → Desmons J (1982) 80:386
- Deleau MH → Bacon CR (1984) 85:368
- Della Giusta A → Cundari A (1986) 94:523-532
- Dei Moro A, Puxeddu M, Radicati di Brozolo F, Villa IM (1982) Rb-Sr and K-Ar Ages on Minerals at Temperatures of 300°-400° C from Deep Wells in the Larderello Geothermal Field (Italy) 81:340
- Dei Moro A → Bigazzi G (1986) 94:46-53
- Dei Moro A → Venturelli G (1984) 86:209
- DeLong SE → Walker D (1982) 79:231
- DeLong SE → Walker D (1984) 85:203
- Demaille D → Duchesne JC (1985) 90:214-225
- Demarchi G → Sinigoi S (1983) 82:351
- Demarchi G → Voishage H (1988) 100:261-267
- Dempster TJ (1985) Garnet zoning and metamorphism of the Barrovian Type Area, Scotland 89:30-38
- Daniel C, Vidal P, Fernandez A, Le Fort P, Peucat J-J (1987) Isotopic study of the Manaslu granite (Himalaya, Nepal): inferences on the age and source of Himalayan leucogranites 96:78-92
- Dennis PF → Elphick SC (1986) 92:322-330
- Dennis PF → Elphick SC (1988) 100:460-495
- Desmons J, Hunziker JC, Delaloye M (1982) Unconvincing Evidence Against the Blocking Temperature Concept. Comments on: "⁴⁰Ar/³⁹Ar Dating of High Pressure Metamorphic Micas from the Gran Paradiso-Area (Western Alps): Evidence Against the Blocking Temperature Concept" by C. Chopin and H. Maluski 80:386
- Deutsch A (1984) Young Alpine dykes south of the Tauern Window (Austria): a K-Ar and Sr isotope study 85:45
- Deutsch S → André L (1986) 92:104-112
- Dick HJB, Bullen T (1984) Chromian spinel as a petrogenetic indicator in abyssal and alpine-type peridotites and spatially associated lavas 86:54
- Dick HJB → Kimball KL (1985) 91:307-320
- Dick HJB → Roex AP le (1985) 90:367-380
- Dickenson MP, Hess PC (1981) Redox Equilibria and the Structural Role of Iron in Aluminosilicate Melts 78:352
- Dickenson MP, Hess PC (1986) The structural role and homogeneous redox equilibria of iron in peraluminous, metaluminous and peralkaline silicate melts 92:207-217
- Dickenson MP → Don Hermes O (1984) 86:366
- Dickin AP (1988) Evidence for limited REE leaching from the Rofna Gneiss, Switzerland - a discussion of the paper by Vocke et al. (1987) (CMP95:145-154) 99:273
- Dickin AP, Exley RA (1981) Isotopic and Geochemical Evidence for Magma Mixing in the Petrogenesis of the Coire Uaigneach Granophyre, Isle of Skye, N.W. Scotland 78:98
- Dickin AP, Jones NW (1983) Relative Elemental Mobility During Hydrothermal Alteration of a Basic Sill, Isle of Skye, N.W. Scotland 82:147
- Dickin AP, Jones NW, Thirwall MF, Thompson RN (1987) A Ce/Nd isotope study of crustal contamination processes affecting Palaeocene magmas in Skye, Northwest Scotland 96:455-464
- Dickin AP → Thompson RN (1982) 79:159
- Dietvorst EJL (1982) Retrograde Garnet Zoning at Low Water Pressure in Metapelite Rocks from Kemö, SW Finland 79:37
- Dimroth E → Woussen G (1981) 78:343
- Dingwell DB, Brearley M (1985) Mineral chemistry of igneous melanite garnets from analcite-bearing volcanic rocks, Alberta, Canada 90:29-35
- Dixon TH (1981) Gebel Dahanib, Egypt: A Late Precambrian Layered Sill of Komatiitic Composition 78:42
- Doe BR → Bacon CR (1984) 85:366
- Domeneghetti C → Dal Negro A (1984) 86:221

- Domeneghetti MC → Rossi G (1983) 83:247
- Domenick MA, Basu AR (1982) Age and Origin of the Cortlandt Complex, New York: Implications from Sm-Nd Data 79:290
- Dong YB → Cooper JA (1983) 82:397
- Don Hermes O, Rao JM, Dickenson MP, Pierce TA (1984) A transitional alkalic diorite dike suite of Mesozoic age in Southeastern New England 88:395
- Don Hermes O → Cortini M (1981) 77:47
- Donnelly-Nolan JM → Grove TL (1986) 92:281-302
- Donnelly-Nolan JM → Grove TL (1988) 99:320
- Dostal J → Bodinier J (1984) 87:43
- Dostal J → Bodinier JL (1981) 78:379
- Dostal J → Dupuy C (1981) 78:77
- Dostal J → Dupuy C (1982) 80:41
- Dostal J → Dupuy C (1986) 98:293-302
- Dostal J → Leyreloup A (1982) 79:68
- Dostal J → Liotard JM (1986) 92:260-268
- Dougan TW (1981) Melting Reactions and Trace Element Relationships in Selected Specimens of Migmatitic Pelites from New Hampshire and Maine 78:337
- Dougan TW (1983) Textural Relations in Melanosomes of Selected Specimens of Migmatitic Pelitic Schists: Implications for Leucosome-Generating Processes 83:82
- Drach V von, Marsh BD, Wasserburg GJ (1986) Nd and Sr isotopes in the Aleutians: multicomponent parenthood of island-arc magmas 92:13-34
- Droll K, Seck HA (1984) A new sampling technique for fluid phases in hydrothermal experiments applied to the determination of the HF-fugacities of the WFO-buffer 88:276
- Dron D → Chopin C (1986) 92:316-321
- Droop G → Bucher-Nurminen K (1983) 84:215
- Druitt TH → Bacon CR (1988) 98:224-258
- Drummond MS, Ragland PC, Wesolowski D (1986) An example of trondhjemite genesis by means of alkali metasomatism: Rockford Granite, Alabama Appalachians 93:96-113
- Dubessy J → Bergman SC (1984) 85:1
- Duchateau N → Wörner G (1983) 84:152
- Duchesne JC, Roelands I, Demaiffe D, Weis D (1985) Petrogenesis of monzonitic dykes in the Egersund-Ogna anorthosite (Rogaland, S.W. Norway): trace elements and isotopic (Sr, Pb) constraints 90:214-225
- Ducrot J → Lancelot JR (1983) 82:312
- Duda A, Schmincke H-U (1985) Polybaric differentiation of alkali basaltic magmas: evidence from green-core clinopyroxenes (Elfel, FRG) 91:340-353
- Duddy IR → Gleadow AJW (1986) 94:405-415
- Duddy IR → Zettler PK (1985) 91:305-306
- Dujon SC, Lagache M (1986) The influence of fluid unmixing on cation exchange between plagioclases and aqueous chloride solutions at 700° C, 1 kbar 92:125-134
- Duke EF, Rumble D III (1986) Textural and isotopic variations in graphite from plutonic rocks, South-Central New Hampshire 93:409-419
- Duncan RA, Green DH (1987) The genesis of refractory melts in the formation of oceanic crust 96:326-342
- Dungan MA, Vance JA, Blanchard DP (1983) Geochemistry of the Shuksan Greenschists and Blueschists, North Cascades, Washington: Variably Fractionated and Altered Metabasalts of Oceanic Affinity 82:131
- Dungan MA → Davidson JP (1986) 100:429-445
- Dungan MA → Nielsen RL (1983) 84:310
- Dunn T (1987) Partitioning of Hf, Lu, Ti, and Mn between olivine, clinopyroxene and basaltic liquid 96:476-484
- Dunning GR, Pedersen RB (1985) U/Pb ages of ophiolites and arc-related plutons of the Norwegian Caledonides: implications for the development of Iapetus 98:13-23
- Dupuy C, Barszcz HG, Liotard JM, Dostal J (1986) Trace element evidence for the origin of ocean island basalts: an example from the Austral Islands (French Polynesia) 96:293-302
- Dupuy C, Dostal J, Fratta M (1982) Geochemistry of the Adamello Massif (Northern Italy) 80:41
- Dupuy C, Dostal J, Leblanc M (1981) Geochemistry of an Ophiolitic Complex from New Caledonia 78:77
- Dupuy C → Bodinier J (1984) 87:43
- Dupuy C → Bodinier JL (1981) 78:379
- Dupuy C → Leyreloup A (1982) 79:68
- Dupuy C → Liotard JM (1986) 92:260-268
- Duthou L → Condomines M (1982) 1982:296
- Dutrow BL, Holdaway MJ, Hinton RW (1986) Lithium in staurolite and its petrologic significance 94:496-506
- Echeverria LM, Aiken BG (1986) Pyroclastic rocks: another manifestation of ultramafic volcanism on Gorgona Island, Colombia 92:428-436
- Echeverria LM → Aiken BG (1984) 86:94
- Edgar AD → Arima M (1981) 77:288
- Edgar AD → Arima M (1983) 84:228
- Edgar AD → Lloyd FE (1985) 91:321-329
- Eggins S → Crawford AJ (1987) 97:417-430
- Eggler DH, Burnham CW (1984) Solution of H₂O in diopside melts: a thermodynamic model 85:58
- Ehlig PL → Barth AP (1986) 100:192-204
- Ehrenberg SN → Smith D (1984) 88:274
- Eiché GE, Francis DM, Ludden JN (1987) Primary alkaline magmas associated with the Quaternary Alligator Lake volcanic complex, Yukon Territory, Canada 95:191-201
- ElGoresy A → Medenbach O (1982) 80:358
- Ellam RM, Hawkesworth CJ (1986) Elemental and isotopic variations in subduction related basalts: evidence for a three component model 98:72-80
- Ellison AJ, Hess PC (1986) Solution behavior of +4 cations in high silica melts: petrologic and geochemical implications 94:343-351
- Elphick SC, Dennis PF, Graham CM (1986) An experimental study of the diffusion of oxygen in quartz and albite using an overgrowth technique 92:322-330
- Elphick SC, Ganguly J, Loomis TP (1985) Experimental determination of cation diffusivities in aluminosilicate garnets. I. Experimental methods and interdiffusion data 90:36-44
- Elphick SC, Graham CM, Dennis PF (1986) An ion microprobe study of anhydrous oxygen diffusion in anorthite: a comparison with hydrothermal data and some geological implications 100:490-495
- Elphick SC → Loomis TP (1985) 90:45-51
- Elphick SC → Ganguly J (1987) 97:537-538
- Elthon D (1986) Comments on "Composition and depth of origin of primary mid-ocean ridge basalts" by D.C. Presnall and J.D. Hoover 94:253-256
- Elthon D, Casey JF (1984) Comment on "Soret separation of midocean ridge basalt magma" by D. Walker and S.E. DeLong 85:197
- Elthon D → Komor SC (1987) 95:278-300
- Embey-Iaziti A, Noke-Fazekas G (1981) Chemical Zoning in the Large Phenocrysts of the Godóvár Tuff, Börzsöny Mts., Hungary 77:325
- Emmermann R → Hoefs J (1983) 83:320
- Enami M, Tokonami M (1984) Coexisting sodic augite and omphacite in a Sanbagawa metamorphic rock, Japan 86:241
- Erdmer P (1981) Metamorphism at the Northwest Contact of the Stanhope Pluton, Quebec Appalachians: Mineral Equilibria in Interbedded Pelite and Calc-Schist 76:109
- Eriksson G → Fei Y (1986) 94:221-229
- Erlank AJ → Haggerty SE (1985) 91:163-170
- Erlank AJ → Roex AP le (1981) 77:24
- Erlank AJ → Roex AP le (1985) 90:367-380
- Ernst RE, Fowler AD, Pearce TH (1985) Modelling of igneous fractionation and other processes using Pearce diagrams 100:12-18
- Ernst WG → Cao Rong-long (1986) 93:160-167
- Ernst WG → Messiga B (1983) 83:1
- Esling C → Wagner F (1982) 80:132
- Esperança S, Holloway JR (1986) The origin of the high-K latites from Camp Creek, Arizona: constraints from experiments with variable f_{O_2} and a_{H_2O} 93:504-512
- Esperança S, Holloway JR (1987) On the

- origin of some miclamprophyres: experimental evidence from a mafic minette 95:207-216
- Essene EJ → Brown PE (1985) 89:358-369
- Essene EJ → Isaacs AM (1981) 77:115
- Essene EJ → Johnson CA (1982) 81:240
- Essene EJ → Johnson CA (1983) 84:191
- Essene EJ → Kuo L-C (1986) 93:335-346
- Essene EJ → Kuo L-C (1986) 94:90-98
- Essene EJ → Moecher DP (1988) 100:92-106
- Essene EJ → Newberry NG (1982) 80:334
- Essene EJ → Sharp ZD (1988) 98:490-501
- Essene EJ → Treiman AH (1984) 85:149
- Essene EJ → Yau Y-C (1984) 89:299
- Essene EJ → Yau Y-C (1986) 94:127-134
- Etheridge MA, Copper JA (1981) Rb/Sr Isotopic and Geochemical Evolution of a Recrystallized Shear (Mylonite) Zone at Broken Hill 78:74
- Eugster HP → Myers J (1983) 82:75
- Eugster HP → Spencer RJ (1984) 86:321
- Evans B → Hay RS (1987) 97:127-141
- Evans B → Olgaard DL (1988) 100:246-260
- Evans BW, Trommsdorff V, Gole G (1981) Geochemistry of High-Grade Eclogites and Metarodongites from the Central Alps 76:301
- Evans BW, Vance JA (1987) Epidote phenocrysts in dacitic dikes, Boulder County, Colorado 96:178-185
- Evans NH, Spear JA (1984) Low-pressure metamorphism and anatexis of Carolina Slate Belt Phyllites in the contact aureole of the Lilesville Pluton, North Carolina, USA 87:297
- Exley RA, Jones AP (1983) $^{87}\text{Sr}/^{86}\text{Sr}$ in Kimberlitic Carbonates by Ion Microprobe: Hydrothermal Alteration, Crustal Contamination and Relation to Carbonatite 83:288
- Exley RA, Sils JD, Smith JV (1982) Geochemistry of Micas from the Finero Spinel-Lherzolite, Italian Alps 81:59
- Exley RA → Dickinson AP (1981) 76:98
- Facchinelli A → Benna P (1981) 78:272
- Falloon TJ → Crawford AJ (1987) 97:417-430
- Farquhar RM → Smith PE (1987) 97:93-104
- Faul H → Lutz TM (1988) 98:212-223
- Faure G → Mensing TM (1983) 82:327
- Faure G → Mensing TM (1984) 87:101
- Fei Y, Saxena SK, Eriksson G (1986) Some binary and ternary silicate solution models 94:221-229
- Fei Y → Saxena SK (1987) 95:370-375
- Feigenson MD (1984) Geochemistry of Kauai volcanics and a mixing model for the origin of Hawaiian alkali basalts 87:109
- Feigenson MD, Hofmann AW, Spera FJ (1983) Case studies on the origin of basalt. II. The transition from tholeiitic to alkalic volcanism on Kohala volcano, Hawaii 84:390
- Feigenson MD → Hofmann AW (1983) 84:382
- Feigenson MD → Hofmann AW (1984) 88:24
- Feigenson MD → Hofmann AW (1987) 95:114-122
- Ferguson AK, Cundari A (1982) Feldspar Crystallization Trends in Leucite-Bearing and Related Assemblages 81:212
- Ferguson KM → Davidson JP (1988) 100:429-445
- Fernandez A → Deniel C (1987) 96:78-92
- Fernandez-Soler JM → Gomez-Pugnaire MT (1987) 95:231-244
- Ferrara G, Preite-Martinez M, Taylor HP Jr, Tonarini S, Turi B (1986) Evidence for crustal assimilation, mixing of magmas, and a ^{87}Sr -rich upper mantle. An oxygen and strontium isotope study of the M. Vulsini volcanic area, Central Italy 92:269-280
- Ferrario A → Cumming GL (1987) 97:19-30
- Ferry JM (1982) A Comparative Geochemical Study of Pelitic Schists and Metamorphosed Carbonate Rocks from South-Central Maine, USA 80:59
- Ferry JM (1985) Hydrothermal alteration of Tertiary igneous rocks from the Isle of Skye, northwest Scotland. I. Gabbros 91:264-282
- Ferry JM (1985) Hydrothermal alteration of Tertiary igneous rocks from the Isle of Skye, northwest Scotland. II. Granites 91:283-304
- Ferry JM (1986) Contrasting mechanisms of fluid flow through adjacent stratigraphic units during regional metamorphism, south-central Maine, USA 96:1-12
- Ferry JM, Mutti LJ, Zuccale GJ (1987) Contact metamorphism/hydrothermal alteration of Tertiary basalts from the Isle of Skye, northwest Scotland 95:166-181
- Ferry JM → Carpenter MA (1984) 87:136
- Ferry JM → Cashman KV (1988) 99:401
- Ferry JM → Rumble D III (1986) 93:420-426
- Fiala J → Kröner A (1988) 99:257
- Fiesinger DW → Nicholas J (1982) 79:201
- Figueredo MCH → Sighinolfi GP (1981) 78:263
- Fine G, Stolper E (1985) The speciation of carbon dioxide in sodium aluminosilicate glasses 91:105-121
- Finkel RC → Newman S (1986) 93:195-206
- Fitz Gerald JD, McLaren AC (1982) The Microstructures of Microcline from Some Granitic Rocks and Pegmatites 80:219
- Fitzgerald JD → Black LP (1984) 85:141
- Fleck RJ, Cries RE (1985) Strontium and oxygen isotopic variations in Mesozoic and Tertiary plutons of central Idaho 90:291-308
- Fleet ME, MacRae ND (1983) Partition of Ni Between Olivine and Sulfide and its Application to Ni-Cu Sulfide Deposits 83:75
- Fleet ME, MacRae ND (1987) Partition of Ni between olivine and sulfide: the effect of temperature, f_{O_2} , and f_{S_2} 95:336-342
- Fleet ME, MacRae ND (1988) Partition of Ni between olivine and sulfide: equilibria with sulfide-oxide liquids 100:462-469
- Fleet ME → Osborne MD (1981) 77:251
- Fiehmig W → Hunziker JC (1986) 92:157-180
- Flörke OW, Köhler-Herbertz B, Langer K, Tönges I (1982) Water in Microcrystalline Quartz of Volcanic Origin: Agates 80:324
- Flower MFJ, Levine HM (1987) Petrogenesis of a tholeiite-boninite sequence from Ayios Mamas, Troodos ophiolite: evidence for splitting of a volcanic arc? 97:508-524
- Floyd PA → Williams CT (1981) 78:111
- Flux S, Chatterjee ND, Langer K (1984) Pressure-induced (Al, Si) IV -ordering in dioctahedral micas? 86:294
- Foden JD → Ramsay WRH (1984) 88:386
- Foden JD → Stolz AJ (1988) 98:374-389
- Fodor RV, Corwin C, Roisenberg A (1985) Petrology of Serra Geral (Paraná) continental flood basalts, southern Brazil: crustal contamination, source material, and South Atlantic magmatism 91:54-65
- Fodor RV, Vetter SK (1984) Rift-zone magmatism: Petrology of basaltic rocks transitional from CFB to MORB, southeastern Brazil margin 88:307
- Foland KA, Henderson CMB, Gleason J (1985) Petrogenesis of the magmatic complex at Mount Ascutney, Vermont, USA: I. Assimilation of crust by mafic magmas based on Sr and O isotopic and major element relationships 90:331-345
- Foland KA, Raczek I, Henderson CMB, Hofmann AW (1988) Petrogenesis of the magmatic complex at Mount Ascutney, Vermont, USA. II. Contamination of mafic magmas and country rock model ages based upon Nd isotopes 98:408-416
- Foland KA → Lutz TM (1988) 98:212-223
- Foley SF, Taylor WR, Green DH (1986) The effect of fluorine on phase relationships in the system $\text{KAlSi}_3\text{O}_8 - \text{Mg}_2\text{SiO}_5 - \text{SiO}_2$ at 28 kbar and the solution mechanism of fluorine in silicate melts 93:46-55
- Foley SF, Taylor WR, Green DH (1986) The role of fluorine and oxygen fugacity in the genesis of the ultrapotassic rocks 94:183-192
- Fonarev VI, Graphchikov AA (1982) Experimental Study of Fe-Mg- and Ca-Distribution Between Coexisting Ortho- and Clinopyroxenes at $P=294$ MPa, $T=750$ and 800°C 79:311
- Fonarev VI, Konilov AN (1986) Experimental study of Fe-Mg distribution between biotite and orthopyroxene at $P=490$ MPa 93:227-235

- Fontan F → Fransolet A-M (1986) 92:502-517
- Forester RM → Spencer RJ (1984) 86:321
- Foster JJ → Williams IS (1984) 88:322
- Fourcade S, Allegre CJ (1981) Trace Elements Behavior in Granite Genesis: A Case Study - The Calc-Alkaline Plutonic Association from the Querigut Complex (Pyrénées, France) 76:177
- Fourcade S, Javoy M (1985) Preliminary investigations of $^{18}\text{O}/^{16}\text{O}$ and D/H compositions in rhyolite-basalts in the In-haou (In Zize) Magmatic Center, central Ahaggar, Algeria 89:285-295
- Fourcade S → Bernard-Griffiths J (1988) 100:339-348
- Fourcade S → Ouzegane K (1989) 98:277-292
- Fowler AD → Ernst RE (1988) 100:12-18
- Fowler MB → Thompson RN (1980) 94:507-522
- Franceschelli M, Mellini M, Memmi I, Ricci CA (1986) Finescale chlorite-muscovite association in low-grade metapelites from Nurra (NW Sardinia), and the possible misidentification of metamorphic vermiculite 93:137-143
- Franceschelli M, Memmi I, Ricci CA (1982) Ca Distribution between Almandine-Rich Garnet and Plagioclase in Pelitic and Psammitic Schists from the Metamorphic Basement of North-Eastern Sardinia 90:285
- Francis D (1985) The Baffin Bay lavas and the value of picrites as analogues of primary magmas 89:144-154
- Francis D → Skulski T (1988) 100:236-245
- Francis D → Stamatiopoulou-Seymour K (1983) 84:6
- Francis DM, Hynes AJ, Ludden JN, Bernard J (1981) Crystal Fractionation and Partial Melting in the Petrogenesis of a Proterozoic High-MgO Volcanic Suite, Ungava, Québec 78:27
- Francis DM → Elché GE (1987) 95:191-201
- Francis John Turner (1984) On the occasion of his 80th birthday 86:1
- Fransolet A-M, Keller P, Fontan F (1986) The phosphate mineral associations of the Tsaobismund pegmatite, Namibia 92:502-517
- Fransolet A-M, Schreyer W (1984) Sodalite, ditriocahedral chlorite: a stable low-temperature phase in the system $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ 86:409
- Fransolet A-M → Schreyer W (1986) 94:333-342
- Franz G, Thomas S, Smith DC (1988) High-pressure phengite decomposition in the Weissenstein eclogite, Münchberger Gneiss Massif, Germany 92:71-85
- Fratini M → Dupuy C (1982) 80:41
- Freer R (1981) Diffusion in Silicate Minerals and Glasses: A Data Digest and Guide to the Literature (Correction) 79:106
- Freer R (1987) A discussion of "Experimental determination of cation diffusivities in aluminosilicate garnets. I. Experimental methods and interdiffusion data" by S.C. Elphick, J. Ganguly and T.P. Loomis 97:535-536
- Freestone IC, Powell R (1983) The Low Temperature Field of Liquid Immiscibility in the System $\text{K}_2\text{O}-\text{Al}_2\text{O}_3-\text{FeO}-\text{SiO}_2$ with Special Reference to the Join Fayalite-Leucite-Silica 82:291
- Freund F (1981) Mechanism of the Water and Carbon Dioxide Solubility in Oxides and Silicates and the Role of O 76:474
- Frey FA, Gerlach DC, Hickey RL, Lopez-Escobar L, Munizaga-Villavicencio F (1984) Petrogenesis of the Laguna del Maule volcanic complex, Chile (36° S) 88:133
- Frey FA → Garcia MO (1986) 94:461-471
- Frey FA → Lanphere MA (1987) 95:100-113
- Frey FA → Price RC (1985) 89:394-409
- Frey FA → Roden MK (1984) 85:376
- Frey FA → Roex AP le (1985) 90:367-380
- Frey FA → West HB (1988) 100:385-397
- Frey M, Hunziker JC, Jäger E, Stern WB (1983) Regional Distribution of White K-Mica Polymorphs and Their Phengite Content in the Central Alps 83:185
- Frey M → Hunziker JC (1988) 92:157-180
- Frey M → Hunziker JC (1987) 96:75-77
- Friedman I → Lee DE (1982) 79:150
- Friedman I → Lee DE (1984) 88:288
- Friedrichsen H → Altherr R (1988) 100:528-551
- Friedrichsen H → Hunziker JC (1986) 92:157-180
- Frolova TI → Bailey JC (1987) 95:155-165
- Frost CD → Geist DJ (1988) 99:105
- Fryer BJ → Kerrich R (1987) 97:156-168
- Fryer BJ → Nutman AP (1984) 87:24
- Fryer BJ → Taylor RP (1981) 77:267
- Fryer BJ → Thurston PC (1983) 83:204
- Fujii T, Scarfe CM (1982) Petrology of Ultramafic Nodules from West Kettle River near Kelowna, Southern British Columbia 80:297
- Fujii T, Scarfe CM (1985) Composition of liquids coexisting with spinel ilmenite at 10 kbar and the genesis of MORBs 90:18-28
- Fujii T → Brearley M (1984) 88:53
- Fujimaki H (1986) Partition coefficients of H, Zr, and REE between zircon, apatite, and liquid 94:42-45
- Fukuoka M → Bhattacharyya PK (1984) 87:65
- Fukuoka M → Dasgupta S (1986) 90:258-261
- Furnes H, Thon A, Nordås J, Garmann LB (1982) Geochemistry of Caledonian Metabasalts from Some Norwegian Ophiolite Fragments 79:295
- Futa K, Le Masurier WE (1983) Nd and Sr Isotopic Studies on Cenozoic Mafic Lavas from West Antarctica: Another Source for Continental Alkali Basalts 83:38
- Fyfe WS → Barriga F (1983) 84:146
- Fyfe WS → Herzberg CT (1983) 84:1
- Fyfe WS → Kerrich R (1987) 95:481-498
- Fyfe WS → Kerrich R (1988) 100:555-559
- Fyfe WS → Radain AAM (1981) 78:358
- Fyfe WS → Sighinolfi GP (1981) 78:263
- Gamble J → Offler R (1981) 76:171
- Gamble JA (1984) Petrology and geochemistry of differentiated teschenite intrusions from the Hunter Valley, New South Wales, Australia 88:173
- Ganguly J, Loomis TP, Elphick SC (1987) Experimental determination of cation diffusivities in aluminosilicate garnets: reply to the discussion by Freer of Part I, and correction of Mn tracer diffusion data in Part II 97:537-538
- Ganguly J → Elphick SC (1985) 90:36-44
- Ganguly J → Loomis TP (1985) 90:45-51
- Garcia MO, Frey FA, Grooms DG (1986) Petrology of volcanic rocks from Kaula Island, Hawaii. Implications for the origin of Hawaiian phonolites 94:461-471
- Garcia MO → Matson DW (1986) 93:399-408
- Garcia MO → Spengler SR (1988) 99:90
- Garcia MO → West HB (1988) 100:383-397
- Garmann LB → Furnes H (1982) 79:295
- Garrison JR Jr (1981) Metabasalts and Metagabbros from the Llano Uplift, Texas: Petrologic and Geochemical Characterization with Emphasis on Tectonic Setting 78:459
- Gaspar JC, Wyllie PJ (1984) The alleged kimberlite-carbonatite relationship: evidence from ilmenite and spinel from Premier and Wesselton Mines and the Benfontein Sill, South Africa 85:133
- Gasparik T (1984) Two-pyroxene thermobarometry with new experimental data in the system $\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ 87:67
- Gasparik T (1985) Experimental study of subsolidus phase relations and mixing properties of pyroxene and plagioclase in the system $\text{Na}_2\text{O}-\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ 89:346-357
- Gasparik T (1987) Orthopyroxene thermobarometry in simple and complex systems 96:357-370
- Gasparik T, Newton RC (1984) The reversed alumina contents of orthopyroxene in equilibrium with spinel and forsterite in the system $\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ 85:186
- Gebauer D, Bernard-Griffiths J, Grünfelder M (1981) U-Pb Zircon and Monazite Dating of a Mafic-Ultramafic Complex and Its Country Rocks - Example: Sauviat-sur-Vige, French Central Massif 76:292
- Gebert W → Abraham K (1983) 82:252
- Gebert W → Schreyer W (1982) 80:103

- Geissman JW → Newberry NG (1982) 80:334
- Geist DJ, Myers JD, Frost CD (1986) Megacryst-bulk rock isotopic disequilibrium as an indicator of contamination processes: The Edgecumbe Volcanic Field, SE Alaska 99:105
- George I → Savage D (1987) 96:391-405
- Gerlach DC, Grove TL (1982) Petrology of Medicine Lake Highland Volcanics: Characterization of Endmembers of Magma Mixing 80:147
- Gerlach DC, Leeman WP, Avé Lallemant HG (1981) Petrology and Geochemistry of Plagiogranite in the Canyon Mountain Ophiolite, Oregon 77:82
- Gerlach DC → Frey FA (1984) 88:133
- Gerlach DC → Grove TL (1982) 80:160
- Gerlach DC → Grove TL (1983) 82:407
- Ghent ED (1986) Tremolite and H₂O activity attending metamorphism of hornblende-plagioclase-garnet assemblages 98:163-168
- Ghent ED, Stout MZ (1981) Geobarometry and Geothermometry of Plagioclase-Biotite-Garnet-Muscovite Assemblages 76:92
- Ghent ED, Stout MZ (1984) TiO₂ activity in metamorphosed pelitic and basic rocks: principles and applications to metamorphism in southeastern Canadian Cordillera 85:248
- Ghent ED → Stout MZ (1986) 92:236-247
- Ghiorsio MS (1984) Activity/composition relations in the ternary feldspars 87:282
- Ghiorsio MS (1985) Chemical mass transfer in magmatic processes. I. Thermodynamic relations and numerical algorithms 90:107-120
- Ghiorsio MS (1987) Chemical mass transfer in magmatic processes. III. Crystal growth, chemical diffusion and thermal diffusion in multicomponent silicate melts 96:291-313
- Ghiorsio MS, Carmichael ISE (1985) Chemical mass transfer in magmatic processes. II. Applications in equilibrium crystallization, fractionation and assimilation 90:121-141
- Ghiorsio MS, Carmichael ISE, Rivers ML, Sack RO (1984) The Gibbs Free Energy of mixing of natural silicate liquids: an expanded regular solution approximation for the calculation of magmatic intensive variables 84:107
- Ghiorsio MS → Kelemen FB (1986) 94:12-28
- Ghose S, Okamura FP, Ohashi H (1986) The crystal structure of CaFe²⁺ SiAlO₄ and the crystal chemistry of Fe²⁺ - Al³⁺ substitution in calcium Tschermak's pyroxene 92:530-535
- Giannetti B, Luhr JF (1983) The white trachytic tuff of Roccamonfina Volcano (Roman Region, Italy) 84:235
- Giannetti B → Luhr JF (1987) 95:420-436
- Gibb FGF → Carswell DA (1987) 95:499-511
- Gibb FGF → Carswell DA (1987) 97:473-487
- Gibb FGF → Henderson CMB (1983) 84:355
- Gibson IL → Thompson RN (1982) 79:159
- Gieré R (1986) Zirconolite, allanite and hoesbomite in a marble skarn from the Bergell contact aureole: Implications for mobility of Ti, Zr and REE 93:459-470
- Gieré R (1987) Titanian clinohumite and geikielite in marbles from the Bergell contact aureole 96:496-502
- Gijbels R → Wörner G (1983) 84:152
- Giles CW, Hallberg JA (1982) The Genesis of the Archaean Welcome Well Volcanic Complex, Western Australia 80:307
- Gillet P, Goffé B (1988) On the significance of aragonite occurrences in the Western Alps 99:70
- Gillot P-Y → Péc S (1987) 95:322-335
- Giovanni R de → Girod M (1981) 77:66
- Girardeau J, Mercier J-CC, Xibin W (1985) Petrology of the mafic rocks of the Xigaze ophiolite, Tibet. Implications for the genesis of the oceanic lithosphere 90:309-321
- Girardeau J → Mercier J-CC (1984) 85:391
- Girod M, Dautria JM, Giovanni R de (1981) A First Insight into the Constitution of the Upper Mantle Under the Hoggar Area (Southern Algeria): The Lherzoliite Xenoliths in the Alkali-Basalts 77:66
- Girod M → Dautria JM (1987) 95:133-144
- Girod M → Leblanc M (1982) 79:347
- Gladney ES → Vaniman DT (1982) 80:341
- Glasman JR (1987) Comments on "The evolution of illite to muscovite: mineralogical and isotopic data from the Glarus Alps, Switzerland" 96:72-74
- Glassley WE (1983) Deep Crustal Carbonates as CO₂ Fluid Sources: Evidence from Metasomatic Reaction Zones 84:15
- Glassley WE → Hickman MH (1984) 87:265
- Glassley WE → Springer N (1983) 82:26
- Glazner AF (1984) Activities of olivine and plagioclase components in silicate melts and their application to geothermometry 88:260
- Gleadow AJW, Duddy IR, Green PF, Lovering JF (1986) Confined fission track lengths in apatite: a diagnostic tool for thermal history analysis 94:405-415
- Gleadow AJW → Zeitler PK (1985) 91:305-308
- Gleason J → Foland KA (1985) 90:331-345
- Gleason JD → Lee DE (1982) 79:150
- Gleason JD → Lee DE (1984) 88:288
- Glikson AY → Jahn B (1982) 80:25
- Godard G, Kienast J-R, Lasnier B (1981) Retrogressive Development of Glaucophane in Some Eclogites from "Massif Armoricain" (East of Nantes, France) 76:126
- Goffé B, Murphy WM, Lagache M (1987) Experimental transport of Si, Al and Mg in hydrothermal solutions: an application to vein mineralization during high-pressure, low-temperature metamorphism in the French Alps 97:438-450
- Goffé B → Chopin C (1981) 76:260
- Goffé B → Gillet P (1988) 99:70
- Gohn E → Haack U (1982) 79:279
- Gohn E → Mengel K (1984) 87:369
- Goldberg SA (1984) Geochemical relationships between anorthositic and associated iron-rich rocks, Laramie Range, Wyoming 87:376
- Goldhaber MB → Spencer RJ (1984) 86:321
- Goldsmith JR (1987) Al/Si interdiffusion in albite: effect of pressure and the role of hydrogen 95:311-321
- Gole MJ, Barnes SJ, Hill RET (1987) The role of fluids in the metamorphism of komatiites, Agnew nickel deposit, western Australia 96:151-162
- Goles GG → Briggs RM (1984) 86:77
- Goles GG → Evans BW (1981) 76:301
- Goles GG → Kays MA (1981) 76:265
- Gomez-Pugnaire MT, Fernandez-Soler JM (1987) High-pressure metamorphism in metabasites from the Betic Cordilleras (S.E. Spain) and its evolution during the Alpine orogeny 95:231-244
- Göncüoğlu MC → Okay AI (1985) 91:196-204
- Gordillo CE, Schreyer W, Werdner G, Abraham K (1985) Lithium in NaBe-cordierites from El Peñón, Sierra de Córdoba, Argentina 90:93-101
- Gorton MP → Barnes S-J (1983) 83:293
- Goto A → Nagata J (1983) 82:42
- Gottfried D → Stern RJ (1986) 92:492-501
- Gottschalk RR → Loomis TP (1981) 76:1
- Gower CF → Schärer U (1986) 94:438-451
- Graham AM, Thirlwall MF (1981) Petrology of the 1979 Eruption of Soufrière Volcano, St. Vincent, Lesser Antilles 76:336
- Graham CM (1981) Experimental Hydrogen Isotope Studies III: Diffusion of Hydrogen in Hydrous Minerals, and Stable Isotope Exchange in Metamorphic Rocks 76:216
- Graham CM → Elphick SC (1988) 100:490-495
- Graham CM, Navrotsky A (1986) Thermochemistry of the tremolite-edenite amphiboles using fluorine analogues, and applications to amphibole-plagioclase-quartz equilibria 93:18-32
- Graham CM → Elphick SC (1986) 92:322-330
- Graham DW, Zindler A, Kurz MD, Jenkins WJ, Batiza R, Staudigel H (1988) He, Pb, Sr and Nd isotope constraints on magma genesis and mantle heterogeneity beneath young Pacific seamounts 99:446

- Grambling JA (1986) A regional gradient in the composition of metamorphic fluids in pelitic schist, Pecos Baldy, New Mexico 94:149-164
- Grant NK, Molling PA (1981) Strontium isotope and Trace Element Profile Through the Partridge River Troctolite, Duluth Complex, Minnesota 77:269
- Grant NK → Mazzone P (1988) 99:267
- Grant SM (1988) Diffusion models for corona formation in metagabbros from the Western Grenville Province, Canada 98:49-63
- Graphchikov AA → Fonarev VI (1982) 79:311
- Gray CM → Cliff RA (1983) 82:91
- Gray CM → Price RC (1985) 89:394-409
- Greaves GN → Binsted N (1985) 89:103-109
- Green DH → Duncan RA (1987) 96:325-342
- Green DH → Foley SF (1986) 93:46-55
- Green DH → Foley SF (1986) 94:183-192
- Green NL (1982) Fluorine Geochemistry of Quaternary Volcanic Rocks from Southwestern British Columbia: Some Petrogenetic Implications 79:405
- Green PF → Gleadlow AJW (1986) 94:405-415
- Green PF → Zettler PK (1985) 91:305-308
- Green TH (1981) Synthetic High-Pressure Micas Compositionally Intermediate Between the Dioctahedral and Trioctahedral Mica Series 78:452
- Green TH, Pearson NJ (1985) Rare earth element partitioning between clinopyroxene and silicate liquid at moderate to high pressure 81:24-38
- Green TH, Watson EB (1982) Crystallization of Apatite in Natural Magmas Under High Pressure, Hydrous Conditions, with Particular Reference to "Orogenic" Rock Series 79:98
- Greggani A → Poli S (1987) 95:322-335
- Gregory RT, Taylor HP Jr (1986) Possible non-equilibrium oxygen isotope effects in mantle nodules, an alternative to the Kyser-O'Neill-Carmichael $^{18}\text{O}/^{16}\text{O}$ geothermometer 93:114-119
- Gregory RT, Taylor HP Jr (1986) Non-equilibrium, metasomatic $^{18}\text{O}/^{16}\text{O}$ effects in upper mantle mineral assemblages 93:124-135
- Greiffo W, Herrmann K, Müller G, Strauss KW (1984) Sr-groenlandite, a weathering product in rich iron ores from the Corrego do Feijão Mine, Minas Gerais, Brazil 87:418
- Grew ES, Abraham K, Medenbach O (1987) Ti-poor hoegbomite in kornupine-cordierite-sillimanite rocks from Ellamankovilpatti, Tamil Nadu, India 95:21-31
- Grew ES, Sandiford M (1984) A staurolite-talc assemblage in tourmaline-phylogopite-chlorite schist from northern Victoria Land, Antarctica, and its petrogenetic significance 87:337
- Grieve RAF, Remy G, Gurov EP, Ryabenko VA (1987) The melt rocks of the Botlysh impact crater, Ukraine, USSR 96:56-62
- Grieve RAF → Reimold WU (1981) 76:73
- Griffin WL, Jacques AL, Sie SH, Ryan CG, Cousens DR, Suter GF (1988) Conditions of diamond growth: a proton microprobe study of inclusions in West Australian diamonds 99:143
- Griffin WL, Mellini M, O'Neil R, Rossi G (1985) Evolution of coronas in Norwegian anorthosites: re-evaluation based on crystal-chemistry and microstructures 91:330-339
- Griffin WL → Andersen T (1984) 86:72
- Griffin WL → Cohen AS (1986) 98:303-311
- Griffin WL → Helvacı C (1983) 83:309
- Griffin WL → Olsen KJ (1984) 87:1
- Griffin WL → Olsen KJ (1984) 87:15
- Griffin WL → O'Reilly SY (1984) 87:220
- Griffiths RW → Martin D (1987) 96:465-475
- Grooms DG → Garcia MO (1986) 94:461-471
- Groot PA de → Baker JH (1983) 82:119
- Groot PA de → Baker JH (1984) 85:102
- Grove TL (1981) Use of FePt Alloys to Eliminate the Iron Loss Problem in 1 Atmosphere Gas Mixing Experiments: Theoretical and Practical Considerations 78:298
- Grove TL, Bryan WB (1983) Fractionation of pyroxene-phyric MORB at low pressure: An experimental study 84:293
- Grove TL, Donnelly-Nolan JM (1986) The evolution of young silicic lavas at Medicine Lake Volcano, California: Implications for the origin of compositional gaps in calc-alkaline series lavas 92:281-302
- Grove TL, Gerlach DC, Sando TW (1982) Origin of Calc-Alkaline Series Lavas at Medicine Lake Volcano by Fractionation, Assimilation and Mixing 80:160
- Grove TL, Gerlach DC, Sando TW, Baker MB (1983) Origin of Calc-Alkaline Series Lavas at Medicine Lake Volcano by Fractionation, Assimilation and Mixing: Corrections and Clarifications 82:407
- Grove TL, Kinzler RJ, Baker MB, Donnelly-Nolan JM, Lashar CE (1986) Assimilation of granite by basaltic magma at Burnt Lava flow, Medicine Lake volcano, northern California: Decoupling of heat and mass transfer 99:320
- Grove TL → Gerlach DC (1982) 80:147
- Grove TL → Nielsen RL (1988) 100:361-373
- Grove TL → Tormey DR (1987) 96:121-139
- Grover J → Davidson PM (1982) 80:66
- Groves DI → Bickle MJ (1983) 84:25
- Grue G → Jahn B (1982) 80:25
- Grunder AL (1987) Low $\delta^{18}\text{O}$ silicic volcanic rocks at the Calabozos Calders Complex, Southern Andes. Evidence for uppercrustal contamination 95:71-81
- Grünenfelder M → Gabauer D (1981) 76:292
- Grünenfelder M → Vocke RD Jr (1987) 95:145-154
- Guichard F → Poli S (1987) 95:322-335
- Gunter WD → Rubie DC (1983) 82:165
- Gupta LN → Johannes W (1982) 79:114
- Gurney JJ → Shee SR (1982) 81:79
- Gurov EP → Grieve RAF (1987) 96:56-62
- Gust DA, Arculus RJ (1986) Petrogenesis of alkalic and calcalkalic volcanic rocks of Mormon Mountain Volcanic Field, Arizona 94:416-426
- Gust DA, Perfit MR (1987) Phase relations of a high-Mg basalt from the Aleutian Island Arc: Implications for primary island arc basalts and high-Al basalts 97:7-18
- Gust DA → Arculus RJ (1984) 85:85
- Gust DA → Phelps DW (1983) 84:182
- Haack U, Heinrichs H, Boneß M, Schneider A (1984) Loss of metals from pelites during regional metamorphism 85:116
- Haack U, Hoefs J, Gohn E (1982) Constraints on the Origin of Damaran Granites by Rb/Sr and $\delta^{18}\text{O}$ Data 79:279
- Haggerty SE, Mariano AN (1983) Strontian-löparite and strombolite: Two new minerals in reomorphic feldites from the Paraná Basin carbonates, South America 84:365
- Haggerty SE, Moore AE, Erlank AJ (1985) Macrocryst Fe-Ti oxides in olivine melilitites from Namaqualand-Bushmanland, South Africa 91:163-170
- Haggerty SE → Tompkins LA (1985) 91:245-263
- Hajash A, Chander GW (1981) An Experimental Investigation of High-Temperature Interactions Between Seawater and Rhyolite, Andesite, Basalt and Peridotite 78:240
- Hajash A Jr (1984) Rare earth element abundances and distribution patterns in hydrothermally altered basalts: experimental results 85:409
- Halbach H, Chatterjee ND (1982) An Empirical Redlich-Kwong-Type Equation of State for Water to 1,000°C and 200 Kbar 79:337
- Halbach H, Chatterjee ND (1984) An internally consistent set of thermodynamic data for twenty-one $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ phases by linear parametric programming 88:14
- Hall RP, Hughes DJ (1987) Noritic dykes of southern West Greenland: early Proterozoic boninitic magmatism 97:169-182
- Hallday JA → Giles CW (1982) 80:307
- Hallday AN → Mahood GA (1988) 100:163-191
- Hallday AN → Stephens WE (1985) 89:226-238
- Hamilton MA → Reid JB Jr (1987) 96:441-454
- Hamilton PJ → Öhlander B (1987) 95:437-450
- Hammerschmidt K, Stöckhert B (1987) A K-Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ study on white mi-

- cas from the Brixen Quartzphyllite, Southern Alps 95:393-406
- Hammond JG (1986) Geochemistry and petrogenesis of Proterozoic diabase in the southern Death Valley region of California 93:312-321
- Hannah JL, Stein HJ (1986) Oxygen isotope compositions of selected Laramide-Tertiary granitoid stocks in the Colorado Mineral Belt and their bearing on the origin of Climax-type granite-molybdenum systems 93:347-358
- Hansen B (1981) The Transition from Pyroxene Granulite Facies to Garnet Clinopyroxene Granulite Facies. Experiments in the System $\text{CaO-MgO-Al}_2\text{O}_3\text{-SiO}_2$ 76:234
- Hansen B → Maalee S (1982) 81:203
- Hansen EC, Janardhan AS, Newton RC, Prame WKB, Kumar GRR (1987) Arrested charnockite formation in southern India and Sri Lanka 96:225-244
- Hansen EC → Janardhan AS (1982) 79:130
- Hansen TB → Altherr R (1988) 100:528-451
- Hanson GN → Nabelek PI (1988) 99:49
- Hanson GN → Vocke RD Jr (1987) 95:145-154
- Hardie LA (1983) Origin of CaCl_2 Brines by Basalt-Seawater Interaction: Insights Provided by Some Simple Mass Balance Calculations 82:205
- Hariya Y, Tsutsumi M (1981) Hydrogen Isotopic Composition of $\text{MnO}(\text{OH})$ Minerals from Manganese Oxide and Massive Sulfide (Kuroko) Deposits in Japan 77:256
- Harley SL (1984) An experimental study of the partitioning of Fe and Mg between garnet and orthopyroxene 85:359
- Harley SL (1986) A sapphirine-cordierite-garnet-sillimanite granulite from Enderby Land, Antarctica: Implications for FMAS petrogenetic grids in the granulite facies 94:452-460
- Harley SL → Black LP (1984) 85:141
- Harmon RS, Hoefs J, Wedepohl KH (1987) Stable isotope (O, H, S) relationships in Tertiary basalts and their mantle xenoliths from the Northern Hessian Depression, W-Germany 95:350-369
- Harmon RS → Wörner G (1987) 95:343-349
- Harnett O → Viswanathan K (1986) 94:238-244
- Harre W → Seidel E (1981) 76:351
- Harris C, Bell JD (1982) Natural Partial Melting of Syenite Blocks from Ascension Island 79:107
- Harris C → Sheppard SMF (1985) 91:74-81
- Harris DM, Anderson AT Jr (1984) Volatiles H_2O , CO_2 , and Cl in a subduction related basalt 87:120
- Harris N (1981) The Application of Spinel-Bearing Metapelites to P/T Determinations: An Example from South India 76:229
- Harrison HR → Aragon R (1984) 85:174
- Harrison TM (1981) Diffusion of ^{40}Ar in Hornblende 78:324
- Harrison TM, Watson EB (1983) Kinetics of Zircon Dissolution and Zirconium Diffusion in Granitic Melts of Variable Water Content 84:66
- Hart SR → Roden MK (1984) 85:376
- Hart SR → Roex AP le (1985) 90:367-380
- Hart SR → Staudigel H (1981) 77:150
- Hart WK → Walter RC (1987) 95:462-480
- Hatton CJ (1984) The effect of pressure, temperature and composition on the distribution of Fe and Mg between olivine, orthopyroxene and liquid; an appraisal of the reversal in the normal fractionation trend in the Bushveld Complex 86:45
- Hawkesworth CJ → Ellam RM (1988) 98:72-80
- Hawkesworth CJ → Lightfoot PC (1987) 95:44-54
- Hawkesworth CJ → Rogers NW (1985) 90:244-257
- Hawkins JW → Bloomer SH (1987) 97:361-377
- Hay RL, O'Neil JR (1983) Carbonatite Tufts in the Laetoli Beds of Tanzania and the Kaiserstuhl in Germany 82:403
- Hay RS, Evans B (1987) Chemically induced grain boundary migration in calcite: temperature dependence, phenomenology, and possible applications to geologic systems 97:127-141
- Heaman LM, Machado N, Krogh TE, Weber W (1986) Precise U-Pb zircon ages for the Molson dyke swarm and the Fox River sill: constraints for Early Proterozoic crustal evolution in north-eastern Manitoba, Canada 94:82-89
- Hedge CE → Armbrustmacher TJ (1982) 79:424
- Heerden LA van, Roex AP le (1988) Petrogenesis of picrite and associated basalts from the southern mid-Atlantic ridge 100:47-60
- Hees E van → Kerrich R (1987) 97:156-168
- Hegde CE Tatsumoto M → Patchett PJ (1981) 78:279
- Heinrich CA (1982) Kyanite-Eclogite to Amphibolite Facies Evolution of Hydrous Mafic and Pelitic Rocks, Adula Nappe, Central Alps 81:30
- Heinrich W, Metz P, Bayh W (1986) Experimental investigation of the mechanism of the reaction: 1 tremolite + 11 dolomite = 5 forsterite + 13 calcite + 9CO_2 + $1\text{H}_2\text{O}$. A SEM study 93:215-221
- Heinrichs H → Haack U (1984) 85:116
- Hekinian R, Walker D (1987) Diversity and spatial zonation of volcanic rocks from the East Pacific Rise near 21°N 96:265-280
- Heimstaedt H → Trzcinski WE Jr (1984) 85:311
- Helvacı C, Griffin WL (1983) Metamorphic Feldspathization of Metavolcanics and Granitoids, Avnik Area, Turkey 83:309
- Henderson CMB, Gibb GF (1983) Felsic mineral crystallization trends in differentiating alkaline basic magmas 84:355
- Henderson CMB → Binsted N (1985) 89:103-109
- Henderson CMB → Foland KA (1985) 90:331-345
- Henderson CMB → Foland KA (1988) 98:408-416
- Henderson P, Nolan J, Cunningham GC, Lowry R (1985) Structural controls and mechanisms of diffusion in natural silicate melts 89:263-272
- Henderson P, Wood RJ (1981) Reaction Relationships of Chrome-Spinels in Igneous Rocks - Further Evidence from the Layered Intrusions of Rhum and Mull, Inner Hebrides, Scotland 78:225
- Henderson P → Lowry RK (1982) 80:254
- Henderson P → Manning DAC (1984) 86:286
- Hendry DAF, Chivas AR, Long JVP, Reed SJB (1985) Chemical differences between minerals from mineralizing and barren intrusions from some North American porphyry copper deposits 89:317-329
- Hendry DAF, Chivas AR, Reed SJB, Long JVP (1981) Geochemical Evidence for Magmatic Fluids in Porphyry Copper Mineralization - Part II. Ion-Probe Analysis of Cu Contents of Mafic Minerals, Koloula Igneous Complex 78:404
- Henjes-Kunst F, Kreuzer H (1982) Isotopic Dating of Pre-Alpidic Rocks from the island of Ios (Cyclades, Greece) 80:245
- Henjes-Kunst F → Altherr R (1988) 100:528-451
- Henjes-Kunst F → Mezger K (1985) 90:323-366
- Henry CD, Price JG, Smyth RC (1988) Chemical and thermal zonation in a mildly alkaline magma system, Inferno Caldera, Trans-Pecos, Texas 96:194-211
- Henry DJ → Rudnick RL (1984) 87:399
- Hensel HD → Wilkinson JFG (1988) 98:326-345
- Hensen BJ (1986) Theoretical phase relations involving cordierite and garnet revisited: the influence of oxygen fugacity on the stability of sapphirine and spinel in the system Mg-Fe-Al-Si-O 92:362-367
- Hentschel G → Abraham K (1983) 82:252
- Herd RK → Windley BF (1984) 86:342
- Herrmann K → Greffo W (1984) 87:418
- Hervig RL, Smith JV (1982) Temperature-dependent Distribution of Cr Between Olivine and Pyroxenes in Lherzolite Xenoliths 81:184
- Hervig RL → London D (1988) 99:360
- Herzberg CT (1983) The Reaction Forsterite + Cordierite = Aluminous Orthopyroxene + Spinel in the System $\text{MgO-Al}_2\text{O}_3\text{-SiO}_2$ 84:84

- Herzberg CT, Baker MB, Wendlandt RF (1982) Olivine Flotation and Settling Experiments on the Join Mg_2SiO_4 - Fe_2SiO_4 . 80:319
- Herzberg CT, Fyfe WS, Carr MJ (1983) Density Constraints on the Formation of the Continental Moho and Crust. 84:1
- Hess PC, Wood MP (1982) Aluminum Coordination in Metasilicic and Peralkaline Silicate Melts. 81:103
- Hess PC → Dickenson MP (1981) 78:352
- Hess PC → Dickenson MP (1986) 92:207-217
- Hess PC → Ellison AJ (1986) 94:343-351
- Hibbard MJ (1981) The Magma Mixing Origin of Mantled Feldspars. 76:158
- Hickey RL → Frey FA (1984) 88:133
- Hickey-Vargas R, Reagan MK (1987) Temporal variation of isotope and rare earth element abundances in volcanic rocks from Guam: Implications for the evolution of the Mariana Arc. 97:497-508
- Hickman M → Kröner A (1981) 76:33
- Hickman MK, Glassley WE (1984) The role of metamorphic fluid transport in the Rb-Sr isotopic resetting of shear zones: evidence from Nordre Strømfjord, West Greenland. 87:265
- Higgins NC, Turner NJ, Black LP (1986) The petrogenesis of an I-type volcanic-plutonic suite: The St. Marys Porphyry, Tasmania. 92:248-259
- Hildreth W, Moorbath S (1988) Crustal contributions to arc magmatism in the Andes of Central Chile. 98:455-489
- Hill JD (1988) Alkaline to transitional ferrogabbro magma associated with paleohelikian anorthositic plutons in the Flowers River area, southeastern Main igneous complex, Labrador. 99:113
- Hill RET → Gole MJ (1987) 96:151-162
- Hill RI, Silver LT, Taylor HP Jr (1986) Coupled Sr-O isotope variations as an indicator of source heterogeneity for the Northern Peninsular Ranges batholith. 92:351-361
- Hinton RW → Dutrow BL (1986) 94:496-506
- Hiroi Y (1983) Progressive Metamorphism of the Unazuki Pelitic Schists in the Hida Terrane, Central Japan. 82:334
- Hiroi Y → Kitamura M (1982) 80:110
- Hochstrasser K → Hunziker JC (1986) 92:157-180
- Hoefs J, Coolen JMM, Touret J (1981) The Sulfur and Carbon Isotope Composition of Scapolite-Rich Granulites from Southern Tanzania. 78:332
- Hoefs J, Emmertmann R (1983) The Oxygen Isotope Composition of Hercynian Granites and Pre-Hercynian Gneisses from the Schwarzwald, SW Germany. 83:320
- Hoefs J, Möller G, Schuster AK (1982) Polymetamorphic Relations in Iron Ores from the Iron Quadrangle, Brazil: The Correlation of Oxygen Isotope Variations with Deformation History. 79:241
- Hoefs J → Armbruster Th (1982) 81:262
- Hoefs J → Haack U (1982) 79:279
- Hoefs J → Harmon RS (1987) 95:350-369
- Hoefs J → Mensing TM (1984) 87:101
- Hoefs J → Wörner G (1987) 95:343-349
- Hoering TC → Rumble D III (1986) 93:420-428
- Hoernes S, Hofer E (1985) Stable isotope evidence for fluid-present and fluid-absent metamorphism in metapelites from the Damara Orogen, Namibia. 90:322-330
- Hofer E → Hoernes S (1985) 90:322-330
- Hofmann AW, Feigenson MD (1983) Case studies on the origin of basalt. I. Theory and reassessment of Grenada basalts. 84:382
- Hofmann AW, Feigenson MD, Raczek I (1984) Case studies on the origin of basalt: III. Petrogenesis of the Mauna Ulu eruption, Kilauea, 1969-1971. 88:24
- Hofmann AW, Feigenson MD, Raczek I (1987) Kohala revisited. 95:114-122
- Hofmann AW → Feigenson MD (1983) 84:390
- Hofmann AW → Foland KA (1988) 98:406-416
- Hofmann AW → Liew TC (1988) 98:129-138
- Hofmann AW → Voshage H (1987) 97:31-42
- Hofmann AW → Voshage H (1988) 100:261-267
- Hoinkes G (1986) Effect of grossular content in garnet on the partitioning of Fe and Mg between garnet and biotite. An empirical investigation on staurolite-zone samples from the Austroalpine Schneeberg complex. 92:393-399
- Hoisch TD (1985) The solid solution chemistry of vesuvianite. 89:205-214
- Holdaway MJ → Dutrow BL (1986) 94:496-506
- Holland TJB (1983) The Experimental Determination of Activities in Disordered and Short-Range Ordered Jadeite Pyroxenes. 82:214
- Holland TJB (1986) Preliminary phase relations involving glaucophane and applications to high pressure petrology: new heat capacity and thermodynamic data. 99:134
- Holland TJB → Perkins D III (1981) 78:99
- Holland TJB → Putnis A (1986) 93:265-272
- Holloway J → McMillan P (1986) 1986:176-182
- Holloway JR → Esperança S (1986) 93:504-512
- Holloway JR → Esperança S (1987) 95:207-216
- Holloway JR → McMillan PF (1987) 97:320-332
- Holloway JR → Vielzeuf D (1988) 98:257-276
- Holm PE (1982) Non-Recognition of Continental Tholeiites Using the Ti-Y-Zr Diagram. 79:308
- Holm PM, Lou S, Nielsen Å (1982) The Geochemistry and Petrogenesis of the Lavas of the Vulsinian District, Roman Province, Central Italy. 80:367
- Holmes RD → Arculus RJ (1984) 85:85
- Hölscher A, Schreyer W, Lattard D (1986) High-pressure, high-temperature stability of aurinamite in the system MgO - BeO - Al_2O_3 - SiO_2 - H_2O . 92:113-127
- Honjo N, Leeman WP (1987) Origin of hybrid ferrolite lavas from Magic Reservoir eruptive center, Snake River Plain, Idaho. 96:163-177
- Honnorez J → Alt JC (1984) 87:149
- Hooper PR (1985) A case of simple magma mixing in the Columbia River Basalt Group: The Wilbur Creek, Lapwai, and Asotin Flows, Saddle Mountains Formation. 91:66-73
- Hoover JD → Presnall DC (1984) 87:170
- Hoover JD → Presnall DC (1986) 94:257-261
- Horrocks PC → Schreyer W (1984) 86:200
- Horton DG (1985) Mixed-layer illite/smectite as a paleotemperature indicator in the Amethyst vein system, Creede district, Colorado, USA. 91:171-179
- Hoschek G (1984) Alpine metamorphism of calcareous metasediments in the Western Hohe Tauern, Tyrol: mineral equilibria in COHS fluids. 87:129
- Houtte P van → Wagner F (1982) 80:132
- Hughes DJ → Hall RP (1987) 97:169-182
- Hughes JM → Mazzone P (1987) 97:292-296
- Hughes SS → Warner RD (1985) 90:386-400
- Huhma H → Cliff RA (1983) 82:91
- Huijsmans JPP → Barton M (1986) 94:472-495
- Hummel W, Arndt J (1985) Variation of viscosity with temperature and composition in the plagioclase system. 90:83-92
- Hunter RH, Sparks RSJ (1987) The differentiation of the Skaergaard Intrusion. 95:451-461
- Hunter WC, Smith D (1981) Garnet Peridotite from Colorado Plateau Ultramafic Diatremes: Hydrates, Carbonates, and Comparative Geothermometry. 76:312
- Hunziker JC, Frey M, Clauer N, Dallmeyer RD (1987) Reply to the comments on the evolution of illite to muscovite by J.R. Glasman. 96:75-77
- Hunziker JC, Frey M, Clauer N, Dallmeyer RD, Friedrichsen H, Fiehmig W, Hochstrasser K, Roggwiler P, Schwander H (1986) The evolution of illite to muscovite: mineralogical and isotopic data from the Glarus Alps, Switzerland. 92:157-180
- Hunziker JC → Desmons J (1982) 80:386
- Hunziker JC → Frey M (1983) 83:185
- Hunziker JC → Voshage H (1987) 97:31-42
- Huppert HE → Spark RSJ (1984) 85:300
- Hurlford AJ (1986) Cooling and uplift patterns in the Lepontine Alps, South Central Switzerland and an age of ver-

- tical movement on the Insularic fault line 92:413-427
- Hurford AJ → Zeitler PK (1985) 91:305-306
- Hynes A (1982) A Comparison of Amphiboles from Medium- and Low-Pressure Metabasites 81:119
- Hynes A → Skulski T (1988) 100:236-245
- Hynes AJ → Francis DM (1981) 78:27
- Ibarguchi IG, Martinez FJ (1982) Petrology of Garnet-Cordierite-Sillimanite Gneisses from the El Tormes Thermal Dome Iberian Hercynian Foldbelt (W Spain) 80:14
- Ikeda K, Yagi K (1982) Crystal-Field Spectra for Blue and Green Diopside Synthesized in the Join $\text{CaMgSi}_2\text{O}_6$ - CaCrAlSiO_6 81:113
- IMA News (1981) 13th General Meeting in Varna, Bulgaria 78:483
- IMA News (1981) 13th General Meeting in Varna, Bulgaria 78:208
- IMA News (1981) International Mineralogical Association (IMA) Statutes 78:367
- IMA News (1982) 13th General Meeting in Varna, Bulgaria 79:446
- IMA News (1987) Constitution as of October 1, 1986 97:143-146
- IMA News (1987) Council, Commissions and Working Groups, National Representatives 97:431-432
- Island P (1983) Iceland and the Ocean Floor. Comparison of Chemical Characteristics of the Magmatic Rocks and Some Volcanic Features 83:31
- Innocenti F → Civetta L (1981) 78:37
- Ireland TR → Williams IS (1984) 88:322
- Irouschek A → Armbruster Th (1983) 82:369
- Isaacs AM, Brown PE, Valley JW, Essene EJ, Peacor DR (1981) An Analytical Electron Microscopic Study of a Pyroxene-Amphibole Intergrowth 77:115
- Ishiwaka K → Aoki K (1981) 76:53
- Ishiwata A (1985) Igneous Petrogenesis of the Yakuno Ophiolite (Japan) in the context of the diversity of ophiolites 89:155-167
- Itaya T, Brothers RN, Black PM (1985) Sulfides, oxides and apatite in high-pressure schists from New Caledonia 91:151-162
- Itaya T, Takasugi H (1988) Muscovite K-Ar ages of the Sanbagawa schists, Japan and argon depletion during cooling and deformation 100:281-290
- Itaya T → Murata M (1983) 84:58
- Itaya T → Ueda A (1981) 78:21
- Ito E, Anderson AT Jr (1983) Submarine Metamorphism of Gabbros from the Mid-Cayman Rise: Petrographic and Mineralogical Constraints on Hydrothermal Processes at Slow-Spreading Ridges 82:371
- Ivarsson G → Arnórsson S (1985) 90:179-189
- Iyer SS, Choudhuri A, Vasconcellos MBA, Cordani UG (1984) Radioactive element distribution in the Archean granulite terrane of Jequié - Bahia, Brazil 85:95
- Izquierdo G → Cathelineau M (1988) 100:418-428
- Jackson NJ, Walsh JN, Pegram E (1984) Geology, geochemistry and petrogenesis of late Precambrian granulites in the Central Hijaz Region of the Arabian Shield 87:205
- Jacobson CE, Sorensen SS (1986) Amphibole compositions and metamorphic history of the Rand Schist and the greenschist unit of the Catalina Schist, Southern California 92:305-315
- Jäger E → Frey M (1983) 83:185
- Jäger E → Stöckhert B (1986) 92:456-470
- Jahn B (1986) Mid-ocean ridge or marginal basin origin of the East Taiwan Ophiolite: chemical and isotopic evidence 92:194-206
- Jahn B, Gruau G, Glikson AY (1982) Komatiites of the Onverwacht Group, S. Africa: REE Geochemistry, Sm/Nd Age and Mantle Evolution 80:25
- Jahn B, Vidal P, Kröner A (1984) Multi-chronometric ages and origin of Archean tonalitic gneisses in Finnish Lapland: a case for long crustal residence time 86:398
- Jahn B, Zhang Z (1984) Archean granulite gneisses from eastern Hebei Province, China: rare earth geochemistry and tectonic implications 85:224
- James D → Maalee S (1988) 98:401-407
- Jamieson RA (1984) Low pressure cordierite-bearing migmatites from Kelly's Mountain, Nova Scotia 86:309
- Jamtveit B (1987) Metamorphic evolution of the Eiksunddal eclogite complex Western Norway, and some tectonic implications 95:82-99
- Janardhan AS, Newton RC, Hansen EC (1982) The Transformation of Amphibolite Facies Gneiss to Charnockite in Southern Karnataka and Northern Tamil Nadu, India 79:130
- Janardhan AS → Hansen EC (1987) 96:225-244
- Jaques AL, Chappell BW, Taylor SR (1983) Geochemistry of Cumulus Peridotites and Gabbros from the Warum Ophiolite Complex, Northern Papua New Guinea 82:154
- Jaques AL → Griffin WL (1988) 99:143
- Jarousse J → Moine B (1981) 76:401
- Jaupart C → Brandeis G (1987) 96:24-34
- Javoy M, Stillman CJ, Pineau F (1986) Oxygen and hydrogen isotope studies on the basal complexes of the Canary Islands: implications on the conditions of their genesis 92:225-235
- Javoy M → Fourcade S (1985) 89:285-295
- Javoy M → Ouzegane K (1988) 98:277-292
- Jenkins DM (1981) Experimental Phase Relations of Hydrous Peridotites Modelled in the System H_2O -CaO-MgO- Al_2O_3 - SiO_2 77:166
- Jenkins DM (1983) Stability and Composition Relations of Calcic Amphiboles in Ultramafic Rocks 83:375
- Jenkins DM (1984) Upper-pressure stability of synthetic margarite plus quartz 86:332
- Jenkins DM (1986) Experimental study of the join tremolite-tschermakite: A reinvestigation 99:392
- Jenkins WJ → Graham DW (1988) 99:446
- Johannes W (1984) Beginning of melting in the granite system Qz - Or - Ab - An - H_2O 86:264
- Johannes W, Gupta LN (1982) Origin and Evolution of a Migmatite 79:114
- Johannes W → Chatterjee ND (1984) 88:1
- Johannes W → Puziewicz J (1988) 100:155-168
- Johannes W → Schliestedt M (1984) 88:403
- Johansson L, Möller C (1986) Formation of sapphirine during retrogression of a basic high-pressure granulite, Roan, Western Gneiss Region, Norway 94:29-41
- Johnson CA, Bohlen SR, Essene EJ (1983) An evaluation of garnet-clinopyroxene geothermometry in granulites 84:191
- Johnson CA, Essene EJ (1982) The Formation of Garnet in Olivine-Bearing Metagabbros from the Adirondacks 81:240
- Johnson CM, Lipman PW (1988) Origin of metaluminous and alkaline volcanic rocks of the Latir volcanic field, northern Rio Grande rift, New Mexico 100:107-128
- Johnson RW → Price RC (1985) 89:394-409
- Johnston AD (1986) Anhydrous P-T phase relations of near primary high-alumina basalt from the South Sandwich Islands. Implications for the origin of island arcs and tonalite-trondhjemite series rocks 92:368-382
- Johnston AD, Beckett JR (1986) Compositional variation of coexisting olivine, orthopyroxene and Fe/Mg-ferrite as a function of T and f_{O_2} : a geothermometer and oxygen-barometer 94:323-332
- Johnston AD, Stout JH (1984) Development of orthopyroxene-Fe/Mg ferrite symplectites by continuous olivine oxidation 88:196
- Johnston AD, Wyllie PJ (1988) Interaction of granitic and basic magmas: experimental observations on contamination processes at 10 kbar with H_2O 98:352-362
- Johnston AD, Wyllie PJ (1988) Constraints on the origin of Archean trondhjemites based on phase relationships of Nöck gneiss with H_2O at 15 kbar 100:35-46
- Johnston AD → Maalee S (1986) 93:449-458
- Jones AP → Exley RA (1983) 83:288
- Jones BF → Spencer KJ (1984) 86:321
- Jones G → Cliff RA (1985) 90:346-352

- Jones JH (1984) Temperature- and pressure-independent correlations of olivine/liquid partition coefficients and their application to trace element partitioning 88:126
- Jones LM → Mensing TM (1984) 87:101
- Jones NW → Dickinson AP (1983) 82:147
- Jones NW → Dickinson AP (1987) 96:455-484
- Jurewicz AJG, Watson EB (1988) Cations in olivine, Part 1: Calcium partitioning and calcium-magnesium distribution between olivines and coexisting melts, with petrologic applications 99:176
- Jurewicz AJG, Watson EB (1988) Cations in olivine, Part 2: Diffusion in olivine xenocrysts, with applications to petrology and mineral physics 99:186
- Jurewicz S → Walker D (1988) 99:306
- Jurewicz SR, Watson EB (1984) Distribution of partial melt in a felsic system: the importance of surface energy 85:25
- Juteau M, Michard A, Albaredo F (1986) The Pb-Sr-Nd isotope geochemistry of some recent circum-Mediterranean granites 92:331-340
- Juteau M, Pagel M, Michard A, Albaredo F (1988) Assimilation of continental crust by komatites in the Precambrian basement of the Carswell structure (Saskatchewan, Canada) 99:219
- Kalsbeek F, Taylor PN (1985) Age and origin of early Proterozoic dolerite dykes in South-West Greenland 89:307-316
- Kalsbeek F, Taylor PN (1986) Chemical and isotopic homogeneity of a 400 km long basic dyke in central West Greenland 93:439-448
- Kamineni DC (1986) A petrochemical study of calcic amphiboles from the East Bull Lake anorthosite-gabbro layered complex, District of Algoma, Ontario 93:471-481
- Kamineni DC (1987) A petrochemical study of calcic amphiboles from the East Bull Lake anorthosite-gabbro layered complex, District of Algoma, Ontario 95:254
- Kamineni DC, Stone D (1983) The Ages of Fractures in the Eye-Dashwa Pluton, Atikokan, Canada 83:237
- Kamineni DC → Kerrich R (1988) 99:430
- Kampmeier E → Vogel TA (1984) 87:231
- Kanisawa S → Aoki K (1981) 76:53
- Karabinos P (1985) Garnet and staurolite producing reactions in a chlorite-chloritoid schist 90:262-275
- Karcho J-P → Moreau C (1987) 95:32-43
- Kashima K → Kouchi A (1983) 83:177
- Katz-Lehnert K → Sommerauer J (1985) 91:354-359
- Katz-Lehnert K → Sommerauer J (1985) 91:360-366
- Kay RW → Kay SM (1985) 90:276-290
- Kay RW → Mahburg Kay S (1983) 82:99
- Kay SM, Kay RW (1985) Aleutian tholeiitic and calc-alkaline magma series. I: the mafic phenocrysts 90:276-290
- Kays MA, McBirney AR, Gofes GG (1981) Xenoliths of Gneisses and the Conformable, Clot-Like Granophyres in the Marginal Border Group, Skaergaard Intrusion, East Greenland 76:265
- Kellemen PB, Ghiorso MS (1986) Assimilation of peridotite in zoned calc-alkaline plutonic complexes: evidence from the Big Jim complex, Washington Cascades 94:12-28
- Keller P → Fransolet A-M (1986) 92:502-517
- Kelts K → Spencer RJ (1984) 86:321
- Kennedy A → West HB (1988) 100:363-397
- Kern H, Wenk H-R (1983) Calcite Texture Development in Experimentally Induced Ductile Shear Zones 83:231
- Kern H → Wagner F (1982) 80:132
- Kerrick R, Fryer BJ, King RW, Willmore LM, Hees E van (1987) Crustal outgassing and LILE enrichment in major lithosphere structures, Archean Abitibi greenstone belt: evidence on the source reservoir from strontium and carbon isotope tracers 97:156-168
- Kerrick R, Fyfe WS, Barnett RL, Blair BB, Willmore LM (1987) Corundum, Cr-muscovite rocks at O'Brien's, Zimbabwe: the conjunction of hydrothermal desilicification and LIL-element enrichment - geochemical and isotopic evidence 95:481-498
- Kerrick R, Fyfe WS, Barnett RL, Blair BB, Willmore LM (1988) Reply to: "A discussion of corundum, Cr-muscovite rocks at O'Brien's, Zimbabwe: the conjunction of hydrothermal desilicification and LIL-element enrichment-geochemical and isotopic evidence" 100:555-559
- Kerrick R, Kamineni DC (1988) Characteristics and chronology of fracture - fluid infiltration in the Archean, Eye Dashwa Lakes pluton, Superior Province: evidence from H, C, O-isotopes and fluid inclusions 99:430
- Kerrick R → Arima M (1986) 99:385
- Kerrick R → Burkhard M (1986) 99:416
- Kerrick R → Reddin AAM (1981) 78:358
- Kienast J-R → Godard G (1981) 78:126
- Kienast J-R → Ouzegane K (1986) 98:277-292
- Kienast JR → Bernard-Griffiths J (1988) 100:339-348
- Kilinc A, Carmichael ISE, Rivers ML, Sack RO (1983) The Ferric-Ferrous Ratio of Natural Silicate Liquids Equilibrated in Air 83:136
- Kimball KL, Spear FS, Dick HJB (1985) High temperature alteration of Abyssal Ultramafics from the Isles Orcades Fracture Zone, South Atlantic 91:307-320
- Kimbrough DL → Mattinson JM (1986) 92:383-392
- King RW → Kerrich R (1987) 97:156-168
- Kingsley RH → Vollmer R (1984) 87:359
- Kinzler RJ → Grove TL (1988) 99:320
- Kirkpatrick RJ → Kuo L-C (1982) 79:13
- Kisch HJ → Padan A (1982) 79:85
- Kistler RW, Chappell BW, Peck DL, Bateman PC (1986) Isotopic variation in the Tuolumne Intrusive Suite, central Sierra Nevada, California 94:205-220
- Kistler RW → Bacon CR (1984) 85:366
- Kistler RW → Masi U (1981) 78:116
- Kitamura M, Hiroi Y (1982) Indialite from Unazuki Pelitic Schist, Japan, and its Transition Texture to Cordierite 80:110
- Kitamura M, Yamada H (1987) Origin of sector twinning in cordierite in Daimonji hornfels, Kyoto, Japan 97:1-6
- Klaaka R → Chopin C (1986) 92:316-321
- Klemd R → Barton JM Jr (1987) 97:488-496
- Klöck W, Palme H, Tobeschall HJ (1986) Trace elements in natural metallic iron from Disko Island, Greenland 93:273-282
- Kober B (1986) Whole-grain evaporation for $^{207}\text{Pb}/^{206}\text{Pb}$ -age investigations on single zircons using a double-filament thermal ion source 93:482-490
- Kober B (1987) Single-zircon evaporation combined with Pb^+ emitter bedding for $^{207}\text{Pb}/^{206}\text{Pb}$ -age investigations using thermal ion mass spectrometry, and implications to zirconology 96:63-71
- Kober B, Lippolt HJ (1985) Pre-Hercynian mantle lead transfer to basement rocks as indicated by lead isotopes of the Schwarzwald crystalline, SW-Germany. I: The lead isotope distribution and its correlation 90:162-171
- Kober B, Lippolt HJ (1985) Pre-Hercynian mantle lead transfer to basement rocks as indicated by lead isotopes of the Schwarzwald crystalline, SW-Germany. II: Lead isotope evolution of the European Hercynides 90:172-178
- Kogarko L → Brey GP (1986) 92:448-455
- Kogarko L → Nickel KG (1985) 91:44-53
- Köhler-Herbert B → Flörke OW (1982) 80:324
- Kohstedt DL, Mackwell SJ (1987) High-temperature stability of San Carlos olivine 95:225-230
- Kohstedt DL → Vaughan PJ (1982) 81:253
- Komor SC, Elthon D, Casey JF (1987) Petrology of a leucogabbroic interval within basal layered gabbros at North Arm Mountain, Bay of Islands ophiolite 95:278-300
- Konilov AN → Fonarev VI (1986) 93:227-235
- Kontak DJ → Pichavant M (1988) 100:300-324
- Kontak DJ → Pichavant M (1986) 100:325-338
- Koons PO (1981) A Study of Natural and Experimental Metasomatic Assemblages in an Ultramafic-Quartzofeldspathic Metasomatic System from the Haast Schist, South Island, New Zealand 78:189
- Koons PO (1982) An Experimental Investigation of the Behavior of Amphibole

- in the System $\text{Na}_2\text{O}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ at High Pressures 79:258
- Koons PO (1984) Implications to garnet-clinopyroxene geothermometry of non-ideal solid solution in jadeitic pyroxenes 88:340
- Koons PO (1986) Relative geobarometry from high-pressure rocks of quartz-feldspathic composition from the Sesia Zone, Western Alps, Italy 93:322-334
- Kooten GK Van (1981) Pb and Sr Systematics of Ultrapotassic and Basaltic Rocks from the Central Sierra Nevada, California 76:378
- Köppel V → Cumming GL (1987) 97:19-30
- Kouchi A, Sugawara Y, Kashima K, Sunagawa I (1983) Laboratory Growth of Sector Zoned Clinopyroxenes in the System $\text{CaMgSi}_2\text{O}_6-\text{CaTiAl}_2\text{O}_6$ 83:177
- Kouchi A, Sunagawa I (1985) A model for mixing basaltic and dacitic magmas as deduced from experimental data 89:17-23
- Kouchi A, Tsuchiyama A, Sunagawa I (1986) Effect of stirring on crystallization kinetics of basalt: texture and element partitioning 93:429-438
- Kouvo O → Patchett J (1986) 92:1-12
- Kouvo O → Patchett PJ (1981) 78:279
- Koyaguchi T (1986) Textural and compositional evidence for magma mixing and its mechanism, Abu volcano group, Southwestern Japan 93:33-45
- Kramm U → Mengel K (1984) 87:389
- Kreulen R (1988) High integrated fluid/rock ratios during metamorphism at Naxos: evidence from carbon isotopes of calcite in schists and fluid inclusions 98:28-32
- Kreuzer H → Henjes-Kunst F (1982) 80:245
- Kreuzer H → Mezger K (1985) 90:353-366
- Kreuzer H → Seidel E (1981) 76:351
- Krogh EJ (1988) The garnet-clinopyroxene Fe-Mg geothermometer - a reinterpretation of existing experimental data 99:44
- Krogh TE → Heaman LM (1986) 94:82-89
- Krogh TE → Schärer U (1986) 94:438-451
- Kronberg BI → Sighinolfi GP (1981) 78:263
- Kröner A, Puustinen K, Hickman M (1981) Geochronology of an Archaean Tonalitic Gneiss Dome in Northern Finland and Its Relation with an Unusual Overlying Volcanic Conglomerate and Komatiitic Greenstone 76:33
- Kröner A, Wendt I, Liew TC, Compston W, Todt W, Flögel J, Vankova V, Vanek J (1988) U-Pb zircon and Sm-Nd model ages of high-grade Moldanubian metasediments, Bohemian Massif, Czechoslovakia 99:257
- Kröner A → Jahn B (1984) 86:398
- Kudo AM → Cigolini C (1987) 96:381-390
- Kudo AM → Singer BS (1986) 94:374-386
- Kullerød K → Merk MBE (1988) 99:344
- Kumar GRR → Hansen EC (1987) 96:225-244
- Kuo L-C, Essene EJ (1986) Petrology of spinel harzburgite xenoliths from the Kishb Plateau, Saudi Arabia 93:335-346
- Kuo L-C, Kirkpatrick RJ (1982) Pre-Eruption History of Phyric Basalts from DSDP Legs 45 and 46: Evidence from Morphology and Zoning Patterns in Plagioclase 79:13
- Kuo L-C, Lee JH, Essene EJ, Peacor DR (1986) Occurrence, chemistry, and origin of immiscible silicate glasses in a tholeiitic basalt: a TEM/AEM study 94:90-98
- Kurasawa H → Bacon CR (1984) 85:366
- Kuroda N, Shiraki K, Urano H (1986) Ferropigeonite quartz dacites from Chichijima, Bonin Islands: Latest differentiates from boninite-forming magma 100:129-138
- Kurz MD → Graham DW (1988) 99:446
- Kuwahara H → Toriumi M (1986) 94:54-62
- Kyser TK, Cameron WE, Nisbet EG (1986) Boninite petrogenesis and alteration history: constraints from stable isotope compositions of boninites from Cape Vogel, New Caledonia and Cyprus 93:222-226
- Kyser TK, O'Neill JR, Carmichael ISE (1981) Oxygen Isotope Thermometry of Basic Lavas and Mantle Nodules 77:11
- Kyser TK, O'Neill JR, Carmichael ISE (1982) Genetic Relations Among Basic Lavas and Ultramafic Nodules: Evidence from Oxygen Isotope Compositions 81:88
- Kyser TK, O'Neill JR, Carmichael ISE (1986) Reply to "Possible non-equilibrium oxygen isotope effects in mantle nodules, an alternative to the Kyser-O'Neill-Carmichael $^{18}\text{O}/^{16}\text{O}$ geothermometer" 93:120-123
- Labotka TC → Nabelek PI (1984) 86:25
- Labotka TC → Nabelek PI (1985) 99:49
- Laetzer JR de → Bickle MJ (1983) 84:25
- Lagache M → Dujon SC (1986) 92:128-134
- Lagache M → Goffé B (1987) 97:438-450
- Lal N → Bai KD (1983) 83:199
- Lamb WM, Valley JW (1988) Granulite facies amphibole and biotite equilibria, and calculated peak-metamorphic water activities 100:349-360
- Lamb WM, Valley JW, Brown PE (1987) Post-metamorphic CO_2 -rich fluid inclusions in granulites 96:485-495
- Lancelot J → Pin C (1982) 79:1
- Lancelot JR, Bouillier AM, Maluski H, Ducrot J (1983) Deformation and Related Radiochronology in a Late Pan-African Mylonitic Shear Zone, Adrar des Iforas (Mali) 82:312
- Lancelot JR → Tubosun IA (1984) 88:188
- Langer K → Flux S (1984) 86:294
- Langer K → Flörke OW (1982) 80:324
- Langmuir CH → Nabelek PI (1986) 93:1-8
- Lanphere MA, Frey FA (1987) Geochemical evolution of Kohala Volcano, Hawaii 95:100-113
- Larsen LM (1981) Sector Zoned Aegirine from the Ilmaussaq Alkaline Intrusion, South Greenland 76:285
- Larson O → Bailey JC (1987) 95:155-165
- Larson PB, Taylor HP Jr (1986) $^{18}\text{O}/^{16}\text{O}$ ratios in ash-flow tuffs and lavas erupted from the central Nevada caldera complex and the central San Juan caldera complex, Colorado 92:146-156
- Lasaga AC → Cygan RT (1982) 79:187
- Lasnier B → Godard G (1981) 78:126
- Lattard D (1987) Subsolidus phase relations in the system Zr-Fe-Ti-O in equilibrium with metallic iron. Implications for lunar petrology 97:264-278
- Lattard D, Schreyer W (1983) Synthesis and stability of the garnet calderite in the system Fe-Mn-Si-O 84:199
- Lattard D → Hölischer A (1986) 92:113-127
- Lattard D → Roever EWF de (1981) 76:472
- La Volpe L → De Fino M (1986) 92:135-145
- Leblanc M, Dautria J-M, Girod M (1982) Magnesian Imerite Xenoliths in a Basanite from Tahaira, Aggag (Southern Algeria) 79:347
- Leblanc M → Dupuy C (1981) 76:77
- Le Breton N, Thompson AB (1988) Fluid-absent (dehydration) melting of biotite in metapelites in the early stages of crustal anatexis 99:226
- Ledger EB → Tieh TT (1981) 76:12
- Lee DE, Christiansen EH (1983) The Granite Problem as Exposed in the Southern Snake Range, Nevada 83:99
- Lee DE, Friedman I, Gleason JD (1982) The Oxygen Isotope Composition of Granitoid and Sedimentary Rocks of the Southern Snake Range, Nevada 79:150
- Lee DE, Friedman I, Gleason JD (1984) Modification of δD values in eastern Nevada granitoid rocks spatially related to thrust faults 86:288
- Lee JH, Peacor DR, Lewis DD, Wintsch RP (1984) Chlorite-illite/muscovite interlayered and interstratified crystals: a TEM/STEM study 88:372
- Lee JH → Kuo L-C (1986) 94:90-98
- Lee TJ → Cliff RA (1985) 90:346-352
- Leeman WP → Gerlach DC (1981) 77:82
- Leeman WP → Honjo N (1987) 96:163-177
- Le Fort P → Deniel C (1987) 96:78-92
- Leister H → Chatterjee ND (1984) 88:1
- Le Mesurier WE → Futa K (1983) 83:38
- Leshner CE → Grove TL (1988) 99:320
- Levi B, Aguirre L, Nystrom JO (1982) Metamorphic Gradients in Burial Metamorphosed Vesicular Lavas: Comparison of Basalt and Spillite in Cretaceous Basic Flows from Central Chile 80:49

- Levi B → Wickman FE (1983) 83:358
- Levine HM → Flower MFJ (1987) 97:509-524
- Lewis DD → Lee JH (1984) 88:372
- Leyreloup A, Bodinier JL, Dupuy C, Dostal J (1982) Petrology and Geochemistry of Granulite Xenoliths from Central Hoggar (Algeria) - Implications for the Lower Crust 79:68
- Leyreloup A → Marchand J (1982) 79:439
- Liew TC, Hofmann AW (1988) Precambrian crustal components, plutonic associations, plate environment of the Hercynian Fold Belt of central Europe: Indications from a Nd and Sr isotopic study 98:129-138
- Liew TC → Kröner A (1988) 99:257
- Lightfoot PC, Hawkesworth CJ, Sethna SF (1987) Petrogenesis of rhyolites and trachytes from the Deccan Trap: Sr, Nd and Pb isotope and trace element evidence 95:44-54
- Lindsley DH → Davidson PM (1982) 80:88
- Lindsley DH → Davidson PM (1985) 91:390
- Lindsley DH → Nabelek PI (1987) 97:66-71
- Lin-gun Liu (1987) High-pressure phase transitions of potassium aluminosilicates with an emphasis on leucite 95:1-3
- Linhout K (1984) Alkali-zirconosilicates in peralkaline rocks 86:155
- Liotard JM, Barciszewski HG, Dupuy C, Dostal J (1986) Geochemistry and origin of basaltic lavas from Marquessaes Archipelago, French Polynesia 92:260-268
- Liotard JM, Briot D, Boivin P (1988) Petrological and geochemical relationships between pyroxene megacrysts and associated alkali-basalts from Massif Central (France) 96:81-90
- Liotard JM → Dautria JM (1987) 95:133-144
- Liotard JM → Dupuy C (1988) 98:293-302
- Liou JG → Cho M (1987) 97:43-50
- Liou JG → Maruyama S (1982) 81:268
- Lipman PW → Johnson CM (1988) 100:107-128
- Lippolt HJ, Schieleicher H, Raczek I (1983) Rb-Sr systematics of Permian volcanites in the Schwarzwald (SW-Germany). Part I: Space of time between plutonism and late orogenic volcanism 84:272
- Lippolt HJ → Kober B (1985) 90:162-171
- Lippolt HJ → Kober B (1985) 90:172-178
- Lippolt HJ → Schieleicher H (1981) 78:220
- Livi KJT (1987) Geothermometry of exsolved augites from the Laramie Anorthosite Complex, Wyoming 96:371-380
- Lloyd FE (1985) Experimental melting and crystallization of glassy olivine melilitites 90:236-243
- Lloyd FE, Arima M, Edgar AD (1985) Partial melting of a phlogopite-clinopyroxene nodule from south-west Uganda: an experimental study bearing on the origin of highly potassic continental rift volcanics 91:321-329
- London D, Hervig RL, Morgan GB VI (1988) Melt-vapor solubilities and elemental partitioning in peraluminous granite pegmatite systems: experimental results with Macusani glass at 200 MPa 99:360
- Long JVP → Hendry DAF (1981) 78:404
- Long JVP → Hendry DAF (1985) 89:317-329
- Long LE, Sial AH, Nekvasil H, Borba GS (1988) Origin of granite at Cabo de Santo Agostinho, Northeast Brazil 92:341-350
- Longstaffe FJ → Aggarwal PK (1987) 96:314-325
- Lonker SW (1988) An occurrence of granddienerite, kornorupine, and tourmaline in southeastern Ontario, Canada 98:502-516
- Loomis TP (1981) An investigation of Disequilibrium Growth Processes of Plagioclase in the System Anorthite-Albite-Water by Methods of Numerical Simulation 76:196
- Loomis TP (1982) Numerical Simulations of Crystallization Processes of Plagioclase in Complex Melts: the Origin of Major and Oscillatory Zoning in Plagioclase 81:219
- Loomis TP, Ganguly J, Elphick SC (1985) Experimental determination of cation diffusivities in aluminosilicate garnets. II. Multicomponent simulation and tracer diffusion coefficient 90:45-51
- Loomis TP, Gottschalk RR (1981) Hydrothermal Origin of Mafic Layers in Alpine-Type Peridotites: Evidence from the Seiad Ultramafic Complex, California, USA 76:1
- Loomis TP, Welber PW (1982) Crystallization Processes in the Rocky Hill Granodiorite Pluton, California: An Interpretation Based on Compositional Zoning of Plagioclase 81:230
- Loomis TP → Elphick SC (1985) 90:36-44
- Loomis TP → Ganguly J (1987) 97:537-538
- Lopez-Escobar L → Frey FA (1984) 88:133
- Lorand JP, Cottin JY (1987) Na-Ti-Zr-H₂O-rich mineral inclusions indicating postcumulus chrome-spinel dissolution and recrystallization in the Western Laouni mafic intrusion, Algeria 97:251-263
- Lou S → Holm PM (1982) 80:367
- Lovering JF → Gleadow AJW (1986) 94:405-415
- Lowry R → Henderson P (1985) 89:263-272
- Lowry RK, Henderson P, Nolan J (1982) Tracer Diffusion of Some Alkali, Alkaline-Earth and Transition Element Ions in a Basaltic and an Andesitic Melt, and the Implications Concerning Melt Structure 80:254
- Lucchetti G → Cortesogno L (1984) 85:14
- Ludden J → Stamatiopoulou-Seymour K (1983) 84:6
- Ludden JN → Eiché GE (1987) 95:191-201
- Ludden JN → Francis DM (1981) 78:27
- Ludwig KR, Copper JA (1984) Geochronology of Precambrian granites and associated U-Ti-Th mineralization, northern Otago province, South Australia 86:298
- Lühr JF, Carmichael ISE (1981) The Colima Volcanic Complex, Mexico: Part II. Late-Quaternary Cinder Cones 76:127
- Lühr JF, Carmichael ISE (1982) The Colima Volcanic Complex, Mexico: III. Ash- and Scoria-Fall Deposits from the Upper Slopes of Volcán Colima 80:262
- Lühr JF, Carmichael ISE (1985) Jorullo Volcano, Michoacán, Mexico (1759-1774): The earliest stages of fractionation in calc-alkaline magmas 90:142-161
- Lühr JF, Giannetti B (1987) The Brown Leucitic Tuff of Roccamontina Volcano (Roman Region, Italy) 95:420-436
- Lühr JF → Giannetti B (1983) 84:235
- Lüth RW → Boettcher A (1987) 97:297-304
- Lutz TM, Foland KA, Faul H, Srogi LA (1988) The strontium and oxygen isotopic record of hydrothermal alteration of syenites from the Abu Khruq complex, Egypt 96:212-223
- Maalee S (1987) The generation and shape of feeder dykes from mantle sources 96:47-55
- Maalee S, Hansen B (1982) Olivine Phenocrysts of Hawaiian Olivine Tholeiite and Oceanite 81:203
- Maalee S, Johnston AD (1986) Geochemical aspects of some accumulation models for primary magmas 93:449-458
- Maalee S, Pedersen RB, James D (1988) Delayed fractionation of basaltic lavas 98:401-407
- Maalee S, Scheie Å (1982) The Permeability Controlled Accumulation of Primary Magma 81:350
- Macaudière J, Brown WL, Ohnenstetter D (1985) Microcrystalline textures resulting from rapid crystallization in a pseudotachylite melt in a meta-anorthosite 89:39-51
- Macaudière J → Brown WL (1986) 92:44-56
- Macera P → Bigazzi G (1986) 94:46-53
- Machado N → Heaman LM (1986) 94:82-89
- Mackwell SJ → Kohlstedt DL (1987) 95:225-230
- MacRae ND → Fleet ME (1983) 83:75
- MacRae ND → Fleet ME (1987) 95:336-342
- MacRae ND → Fleet ME (1988) 100:462-469
- MacRae ND → Sharma RS (1981) 78:48
- Madsen DB → Spencer RJ (1984) 86:321

- Magaritz M → Bogoch R (1983) 83:227
 Magdougall JD → Newman S (1986) 93:195-206
 Mahburg Kay S, Kay RW, Brueckner HK, Rubenstein JL (1983) Tholeiitic Aleutian Arc Plutonism: The Finger Bay Pluton, Adak, Alaska 82:99
 Mahood GA (1981) Chemical Evolution of a Pleistocene Rhyolitic Center: Sierra La Primavera, Jalisco, México 77:129
 Mahood GA, Baker DR (1986) Experimental constraints on depths of fractionation of mildly alkalic basalts and associated felsic rocks: Pantelleria, Strait of Sicily 93:251-264
 Mahood GA, Halliday AN (1986) Generation of high-silica rhyolite: A Nd, Sr, and O isotopic study of Sierra La Primavera, Mexican Neovolcanic Belt 100:183-191
 Mahood GA → Novak SW (1986) 94:352-373
 Malpas J → Alabaster T (1982) 81:168
 Malpas J → Pedersen RB (1984) 88:36
 Maluski H → Chopin C (1982) 80:391
 Maluski H → Lancelot JR (1983) 82:312
 Manetti P → Civetta L (1981) 78:37
 Mann AC (1983) Trace Element Geochemistry of High Alumina Basalt - Andesite - Dacite - Rhyodacite Lavas of the Main Volcanic Series of Santorini Volcano, Greece 84:43
 Manning CE, Bird DK (1986) Hydrothermal clinopyroxenes of the Skaergaard intrusion 92:437-447
 Manning DAC (1981) The Effect of Fluorine on Liquidus Phase Relationships in the System $Qz-Ab-Or$ with Excess Water at 1 kb. 76:206
 Manning DAC, Henderson P (1984) The behaviour of tungsten in granitic melt-vapour systems 86:286
 Manoochian PR → Warner RD (1985) 90:386-400
 Marchand J, Bossière G, Leyreloup A (1982) Pinite and Pseudo-"Glass" in High-Grade Metamorphic Gneisses. A Discussion of: "Biotite Melting in High-Grade Metamorphic Gneisses from the Haut-Allier (French Massif Central)" (Discussion) 79:439
 Märcke de Lummen G van, Verkaeren J (1986) Physicochemical study of skarn formation in pelitic rock, Costabonne peak area, eastern Pyrenees, France 93:77-88
 Mariano AN → Haggerty SE (1983) 84:365
 Marsh BD (1981) On the Crystallinity, Probability of Occurrence, and Rheology of Lava and Magma 78:85
 Marsh BD (1986) Crystal size distribution (CSD) in rocks and the kinetics and dynamics of crystallization. I. Theory 95:277
 Marsh BD → Cashman KV (1986) 99:292
 Marsh BD → Drach V von (1986) 92:13-34
 Marsh BD → Myers JD (1981) 77:272
 Marsh BD → Myers JD (1985) 91:221-234
 Marsh BD → Myers JD (1986) 94:1-11
 Marsh JS → Rogers NW (1985) 90:244-257
 Marshall DD → Abercrombie HJ (1987) 97:305-312
 Martignole J, Sisi J-C (1981) Cordierite-Garnet- H_2O Equilibrium: A Geological Thermometer, Barometer and Water Fugacity Indicator 77:38
 Martin D, Griffiths RW, Campbell IH (1987) Compositional and thermal convection in magma chambers 96:465-475
 Martin H, Querré G (1984) A 2.5 G.a. reworked sialic crust: Rb-Sr ages and isotopic geochemistry of late Archean volcanic and plutonic rocks from E. Finland 85:292
 Martin H → Weber C (1985) 90:52-62
 Martinez FJ → Ibarra IG (1982) 80:14
 Marvejol P → Turpin L (1986) 98:139-147
 Maruyama S, Liou JG, Suzuki K (1982) The Peristerite Gap in Low-Grade Metamorphic Rocks 81:268
 Maruyama S → Cho M (1987) 97:43-50
 Masi U, O'Neil JR, Kistler RW (1981) Stable Isotope Systematics in Mesozoic Granites of Central and Northern California and Southwestern Oregon 78:116
 Massare D → Clocchiatti R (1985) 89:193-204
 Massonne H-J, Schreyer W (1987) Phenite geobarometry based on the limiting assemblage with K-feldspar, phlogopite, and quartz 96:212-224
 Masuda A → Terakado Y (1986) 99:1
 Masui M → Toriumi M (1986) 94:54-62
 Mathison CI (1987) Pyroxene oikocrysts in troctolitic cumulates - evidence for supercooled crystallisation and postcumulus modification 97:228-236
 Matson DW, Muenow DW, Garcia MO (1986) Volatile contents of phlogopite micas from South African kimberlite 93:399-408
 Matsuo S → Satake H (1984) 86:19
 Matthey DP (1982) The Minor and Trace Element Geochemistry of Volcanic Rocks from Truk, Ponape and Kusaie, Eastern Caroline Islands: the Evolution of a Young Hot Spot Trace Across Old Pacific Ocean Crust 80:1
 Matthews A (1985) Kinetics and mechanisms of the reaction of zoisite to anorthite under hydrothermal conditions: reaction phenomenology away from the equilibrium region 89:110-121
 Matthews A, Schliestedt M (1984) Evolution of the blueschist and greenschist facies rocks of Sifnos, Cyclades, Greece. A stable isotope study of subduction-related metamorphism 88:150
 Matthews A → Altherr R (1986) 100:528-451
 Matthews A → Reymer APS (1984) 85:336
 Matthews A → Schliestedt M (1987) 97:237-250
 Mattinson JM, Kimbrough DL, Bradshaw JY (1986) Western Fiordland orthogneiss: early Cretaceous arc magmatism and granulite facies metamorphism, New Zealand 92:383-392
 Mattioli GS, Wood BJ (1988) Magnetite activities across the $MgAl_2O_4$ - Fe_3O_4 spinel join, with application to thermobarometric estimates of upper mantle oxygen fugacity 96:148-162
 Mattison GD → Nelson DO (1987) 97:72-92
 Maury RC → Arco Ph d' (1981) 77:177
 Mazzone P, Grant NK (1986) Mineralogical and isotopic evidence for phenocryst-matrix disequilibrium in the Garner Mountain andesite 99:267
 Mazzone P, Stewart DC, Hughes JM (1987) Sub-solidus dehydration of amphiboles in an andesitic magma 97:292-296
 Mazzucchelli M → Voshage H (1988) 100:261-267
 McBirney AR, Taylor HP, Armstrong RL (1987) Paricutin re-examined: A classic example of crustal assimilation in calcalkaline magma 95:4-20
 McBirney AR → Kays MA (1981) 76:265
 McCallister RH, Nord GL Jr (1981) Subcalic Diopside from Kimberlites: Chemistry, Exsolution Microstructures, and Thermal History 78:118
 McCallister RH → Aragon R (1984) 85:174
 McCarthy TS → Clifford TN (1981) 77:225
 McCulloch MT, Bradshaw JY, Taylor SR (1987) Sm-Nd and Rb-Sr isotopic and geochemical systematics in Phanerozoic granulites from Fiordland, Southwest New Zealand 97:183-195
 McCulloch MT → Nelson DR (1984) 88:164
 McCulloch MT → Windrim DP (1986) 94:299-303
 McDougall I → Wijbrans JR (1986) 93:187-194
 McIver JR (1981) Aspects of Ultrabasic Alkaline Intrusive Rocks from Bitterfontein, South Africa 78:1
 McKenzie D → Bickle MJ (1987) 95:364-392
 McKenzie J → Spencer RJ (1984) 86:321
 McKinstry BW → Skippen G (1985) 89:256-262
 McLaren AC → Fitz Gerald JD (1982) 80:219
 McLelland JM → Whitney PR (1983) 82:34
 McMillan PF, Holloway JR (1987) Water solubility in aluminosilicate melts 97:320-332
 McMillan PF, Peraudeau G, Holloway J, Coutures J-P (1986) Water solubility in a calcium aluminosilicate melt 1986:176-182
 McMillan PF → Clemens JD (1982) 79:436
 Mearns EW → Neumann E-R (1986) 98:184-193

- Medaris LG Jr (1984) A geothermobarometric investigation of garnet peridotites in the Western Gneiss Region of Norway 87:72
- Medenbach O, ElGoresy A (1982) Uvöspinel in Native Iron-Bearing Assemblages and the Origin of These Assemblages in Basalts from Ovilak, Greenland, and Bühl, Federal Republic of Germany 80:358
- Medenbach O → Abraham K (1983) 82:252
- Medenbach O → Chopin C (1986) 92:316-321
- Medenbach O → Grew ES (1987) 95:21-31
- Medenbach O → Schreyer W (1981) 77:93
- Medenbach O → Schreyer W (1982) 80:103
- Medhioub M → Veide B (1988) 96:122-127
- Meen JK (1987) Formation of shoshonites from calcalkaline basalt magmas: geochemical and experimental constraints from the type locality 97:333-351
- Mehnert H → Basu AR (1984) 86:35
- Meijer A (1983) The Origin of Low-K Rhyolites from the Mariana Frontal Arc 83:45
- Meijer A, Reagan M (1981) Petrology and Geochemistry of the Island of Sarigan in the Mariana Arc; Calc-Alkaline Volcanism in an Oceanic Setting 77:337
- Mellini M, Trommsdorff V, Compagnoni R (1987) Antigorite polysomatism: behaviour during progressive metamorphism 97:147-155
- Mellini M → Franceschelli M (1986) 93:137-143
- Mellini M → Griffin WL (1985) 91:330-339
- Melson WG → Roden MK (1984) 85:376
- Memmi I → Franceschelli M (1982) 80:285
- Memmi I → Franceschelli M (1986) 93:137-143
- Mengel K, Kramm U, Wedepohl KH, Gohn E (1984) Sr isotopes in peridotite xenoliths and their basaltic host rocks from the northern Hessian Depression (NW Germany) 87:369
- Mensing TM, Faure G (1983) Identification and Age of Neofomed Paleozoic Feldspar (Adularia) in a Precambrian Basement Core from Scioto County, Ohio, USA 82:327
- Mensing TM, Faure G, Jones LM, Bowman JR, Hoefs J (1984) Petrogenesis of the Kirkpatrick Basalt, Solo Nunatak, Northern Victoria Land, Antarctica, based on isotopic compositions of strontium, oxygen and sulfur 87:101
- Menuge JF (1988) The petrogenesis of massif anorthosites: a Nd and Sr isotopic investigation of the Proterozoic of Rogaland/Vest-Agder, SW Norway 98:363-373
- Mercier J-CC, Benoit V, Girardeau J (1984) Equilibrium state of diopside-bearing harzburgites from ophiolites: geobarometric and geodynamic implications 85:391
- Mercier J-CC → Bertrand P (1986) 93:168-178
- Mercier J-CC → Cabanes N (1988) 100:374-384
- Mercier J-CC → Girardeau J (1985) 90:309-321
- Merino E, Ortoleva P, Strickholm P (1983) Generation of Evenly-Spaced Pressure-Solution Seams During (Late) Diagenesis: A Kinetic Theory 82:360
- Mertes H, Schmincke H-U (1985) Mafic potassic lavas of the Quaternary West Eifel volcanic field I. Major and trace elements 89:330-345
- Messiga B (1987) Alpine metamorphic evolution of Ligurian Alps (North-West Italy): chemography and petrological constraints inferred from metamorphic climax assemblages 95:269-277
- Messiga B, Piccardo GB, Ernst WG (1983) High-Pressure Ec-Alpine Parageneses Developed in Magnesian Metagabbros, Gruppo di Voitri, Western Liguria, Italy 83:1
- Metz J → Bacon CR (1984) 85:346
- Metz P → Dachs E (1988) 100:542-551
- Metz P → Heinrich W (1986) 93:215-221
- Mevel C (1981) Occurrence of Pumpellyite in Hydrothermally Altered Basalts from the Vema Fracture Zone (Mid-Atlantic Ridge) 78:386
- Mevel C (1988) Metamorphism in oceanic layer 3, Goringe Bank, Eastern Atlantic 100:496-509
- Mezger K, Altherr R, Okrusch M, Henjes-Kunst F, Kreuzer H (1985) Genesis of acid/basic rock associations: a case study, The Kallithea intrusive complex, Samos, Greece 90:353-366
- Michael PJ (1984) Chemical differentiation of the Cordillera Paine granite (Southern Chile) by *in situ* fractional crystallization 87:179
- Michael PJ, Chase RL (1987) The influence of primary magma composition, H₂O and pressure on Mid-Ocean Ridge basalt differentiation 96:245-253
- Michard A → Alibert C (1983) 82:176
- Michard A → Juteau M (1986) 92:331-340
- Michard A → Juteau M (1988) 99:219
- Michie J → Mohr DW (1986) 92:400-411
- Milne KP, Starmir IC (1982) Extreme Differentiation in the Proterozoic Gjerstad-Mørkeheia Complex of South Norway 79:381
- Miodowski AE → Savage D (1987) 96:391-405
- Mitchell RH (1981) Titaniferous Phlogopites from the Leucite Lamproites of the West Kimberley Area, Western Australia 76:243
- Mitchell RH (1984) Garnet Iherzolites from the Hanau-I and Lourensia kimberlites of Namibia 86:178
- Mitchell RH → Arculus RJ (1984) 85:85
- Mittlefehldt DW (1984) Genesis of clinopyroxene-amphibole xenoliths from Birket Ram: trace element and petrological constraints 86:280
- Mittlefehldt DW (1986) Petrology of high pressure clinopyroxenite series xenoliths, Mount Carmel, Israel 94:245-252
- Miura Y, Rucklidge J, Nord GL Jr (1981) The Occurrence of Chlorine in Serpentine Minerals 76:17
- Moecher DP, Essene EJ, Anovitz LM (1988) Calculation and application of clinopyroxene-garnet-plagioclase-quartz geobarometers 100:92-106
- Mohr DW, Barnett RL, Michie J (1986) Chemical processes and migration of elements during retrogression of a staurolite zone assemblage in western North Carolina 92:400-411
- Moine B, Sauvan P, Jarousse J (1981) Geochemistry of Evaporite-Bearing Series: A Tentative Guide for the Identification of Metaevaporites 76:401
- Mokhtari A → Wagner C (1987) 96:186-191
- Molin GM → Dal Negro A (1984) 86:221
- Molin GM → Dal Negro A (1986) 92:35-43
- Möller C → Johansson L (1986) 94:29-41
- Möller P (1988) The dependence of partition coefficients on differences of ionic volumes in crystal-melt systems 99:62
- Möller P, Muecke GK (1984) Significance of Europium anomalies in silicate melts and crystal-melt equilibria: a re-evaluation 87:242
- Molling PA → Grant NK (1981) 77:269
- Monié P → Chopin C (1984) 87:388
- Moorbath S → Hildreth W (1988) 98:455-489
- Moore AE (1987) A model for the origin of ilmenite in kimberlite and diamond: implications for the genesis of the discrete nodule (megacryst) suite 95:245-253
- Moore AE (1988) Olivine: a monitor of magma evolutionary paths in kimberlites and olivine melilitites 99:238
- Moore AE → Haggerty SE (1985) 91:163-170
- Moore JM → Waters DJ (1985) 91:369
- Moore JM Jr → Pride C (1983) 82:187
- Mora CI, Valley JW (1985) Ternary feldspar thermometry in granulites from the Oaxacan Complex, Mexico 89:215-225
- Morad S → AlDahan AA (1988) 100:19-34
- Morand P → Condomines M (1982) 1982:296
- Moreau C, Brown WL, Karche J-P (1987) Monzo-anorthosite from the Taguel ring-complex, Air, Niger: a hybrid rock with cumulus plagioclase and an infiltrated granitic intercumulus liquid? 95:32-43
- Moret LK → Stebbins JF (1982) 80:276
- Moret LK → Stebbins JF (1984) 98:131
- Morgan GB VI → London D (1988) 99:360
- Morikyo T (1984) Carbon isotopic study on coexisting calcite and graphite in

- the Ryoke metamorphic rocks, northern Kiso district, central Japan 87:251
- Morikyo T (1986) Hydrogen and carbon isotope studies on the graphite-bearing metapelites in the northern Kiso district of central Japan 94:165-177
- Merk MBE, Kullerud K, Stabel A (1988) Sm-Nd dating of Svee eclogites, Norrbotten, Sweden - Evidence for early Caledonian (505 Ma) subduction 99:344
- Morogan V, Woolley AR (1988) Fenitization at the Alnö carbonatite complex, Sweden: distribution, mineralogy and genesis 100:169-182
- Morris PA (1986) Constraints on the origin of mafic alkaline volcanics and included xenoliths from Oberon, New South Wales, Australia 93:207-214
- Morrison DA → Ashwal LD (1983) 82:259
- Morrison J, Valley JW (1988) Contamination of the Marcy Anorthosite Massif, Adirondack Mountains, NY: petrologic and isotopic evidence 98:97-108
- Morrison MA → Thompson RN (1982) 79:159
- Muecke GK → Clarke DB (1983) 83:117
- Muecke GK → Möller P (1984) 87:242
- Muecke GK → Pride C (1981) 76:463
- Muecke GK → Pride C (1982) 80:379
- Muehlenbachs K, Byerly G (1982) ¹⁸O-Enrichment of Silicic Magmas Caused by Granitic Fractionation at the Galapagos Spreading Center 79:76
- Muehlenbachs K → Staudigel H (1981) 77:150
- Muehlenbachs K → Sturchio NC (1985) 91:188-195
- Muenow DW → Matson DW (1986) 93:399-408
- Mukhopadhyay DK → Davidson PM (1984) 86:258
- Müller G → Greiffo W (1984) 87:418
- Müller G → Hoefs J (1982) 79:241
- Müller WF → Schreyer W (1982) 80:103
- Mullins O Jr → Walker D (1981) 76:455
- Munizaga-Villavicencio F → Frey FA (1984) 88:133
- Munksgaard NC (1984) High $\delta^{18}\text{O}$ and possible pre-eruptive Rb-Sr isochrons in cordierite-bearing Neogene volcanics from SE Spain 87:351
- Munksgaard NC, Zeck HP (1984) Oxygen-isotope systematics of a strongly recrystallized granitic rock complex, Grenville Belt, SW Sweden 85:67
- Munoz JL → Selverstone J (1987) 96:426-440
- Murata M, Itaya T, Ueda Y (1983) Sulphide and Oxide Minerals from the Ohmine Granitic Rocks in Kii Peninsula, Central Japan, and Their Primary Paragenetic Relations 84:58
- Murphy WM → Goffé B (1987) 97:438-450
- Mutti LJ → Ferry JM (1987) 95:166-181
- Myers J, Eugster HP (1983) The System Fe-Si-O: Oxygen Buffer Calibrations to 1,500 K 82:75
- Myers JD, Marsh BD (1981) Geology and Petrogenesis of the Edgecumbe Volcanic Field, SE Alaska: The Interaction of Basalt and Sialic Crust 77:272
- Myers JD, Marsh BD, Sinha AK (1985) Strontium isotopic and selected trace element variations between two Aleutian volcanic centers (Adak and Atka): implications for the development of arc volcanic plumbing systems 91:221-234
- Myers JD, Marsh BD, Sinha AK (1986) Geochemical and strontium isotopic characteristics of parental Aleutian Arc magmas: evidence from the basaltic lavas of Atka 94:1-11
- Myers JD → Geist DJ (1988) 99:105
- Mysen BO, Carmichael ISE, Virgo D (1985) A comparison of iron redox ratios in silicate glasses determined by wet chemical and ⁵⁷Fe Mössbauer resonant absorption methods 90:101-106
- Mysen BO, Virgo D (1985) Structure and properties of fluorine-bearing aluminosilicate melts: the system Na₂O-Al₂O₃-SiO₂-F at 1 atm 91:205-220
- Nabelek PI, Hanson GN, Labotka TC, Papike JJ (1988) Effects of fluids on the interaction of granites with limestones: The Notch Peak Stock, Utah 99:49
- Nabelek PI, Labotka TC, O'Neil JR, Papike JJ (1984) Contrasting fluid/rock interaction between the Notch Peak granitic intrusion and argillites and limestones in western Utah: evidence from stable isotopes and phase assemblages 86:25
- Nabelek PI, Langmuir CH (1986) The significance of unusual zoning in olivines from FAMOUS area basalt 527-1-1 93:1-8
- Nabelek PI, Lindsley DH, Bohlen SR (1987) Experimental examination of two-pyroxene graphical thermometers using natural pyroxenes with application to metigneous pyroxenes from the Adirondack Mountains, New York 97:66-71
- Naef U, Stern WB (1982) Some Critical Remarks on the Analysis of Phengite and Paragonite Components in Muscovite by X-Ray Diffractometry 79:355
- Nagata J, Goto A, Obata M (1983) The Parabolic Pattern of Chromium Partitioning Observed Between Pyroxenes and Spinel from Ultramafic Rocks and Its Petrologic Significance 82:42
- Nagpal KK → Bai KD (1983) 83:199
- Nakajima Y, Ribbe PH (1981) Texture and Structural Interpretation of the Alteration of Pyroxene to Other Biopyroxenes 78:230
- Nakamura N → Terakado Y (1984) 87:407
- Naldrett AJ → Barnes S-J (1983) 83:293
- Narayana BL → Condie KC (1982) 81:157
- Naslund HR (1984) Supersaturation and crystal growth in the roofzone of the Skaergaard magma chamber 86:89
- Naslund HR (1986) Disequilibrium partial melting and rheomorphic layer formation in the contact aureole of the Bastøssoppen sill, East Greenland 93:359-367
- Navon O → Reymer APS (1984) 85:336
- Navrotsky A → Graham CM (1986) 93:18-32
- Neall FB → Sandiford M (1987) 95:217-225
- Nédélec A, Paquet J (1981) Biotite Melting in High-Grade Metamorphic Gneisses from the Haut Allier (French Massif Central) 77:1
- Nédélec A, Paquet J (1982) A Reply to Clemens and McMillan's and Marchand, Bossière and Leyreloup's Discussions (Discussion) 79:443
- Needham HD → Roex AP le (1981) 77:24
- Negga HS, Sheppard SMF, Rosenbaum JM, Cuney M (1986) Late Hercynian Uvein mineralization in the Alps: fluid inclusion and C, O, H isotopic evidence for mixing between two externally derived fluids 93:179-186
- Nekvasil H → Long LE (1986) 92:341-350
- Nelson DO, Nelson KL, Reeves KD, Mattison GD (1987) Geochemistry of Tertiary alkaline rocks of the Eastern Trans-Pecos Magmatic Province, Texas 97:72-92
- Nelson DR, Crawford AJ, McCulloch MT (1984) Nd-Sr isotopic and geochemical systematics in Cambrian boninites and tholeiites from Victoria, Australia 88:164
- Nelson KL → Nelson DO (1987) 97:72-82
- Nelson SA, Carmichael ISE (1984) Pleistocene to recent alkalic volcanism in the region of Sanganguey volcano, Nayarit, Mexico 85:321
- Nesbitt HW, Cramer JJ (1981) Graphical Representation of Mineral Equilibria and Materials Balances in Igneous Rocks 78:136
- Neumann E-R, Andersen T, Mearns EW (1988) Olivine clinopyroxene xenoliths in the Oslo Rift, SE Norway 98:164-193
- Neumann E-R, Schilling J-G (1984) Petrology of basalts from the Mohns-Knipovich Ridge; the Norwegian-Greenland Sea 85:209
- Newberry NG, Peacor DR, Essene EJ, Geissman JW (1982) Silicon in Magnetite: High Resolution Microanalysis of Magnetite-Ilimenite Intergrowths 80:334
- Newman S, Magdougall JD, Finkel RC (1986) Petrogenesis and ²³⁸Th-²³⁵U disequilibrium at Mt. Shasta, California, and in the Cascades 93:195-206
- Newton RC → Gasparik T (1984) 85:186
- Newton RC → Hansen EC (1987) 96:225-244
- Newton RC → Janardhan AS (1982) 79:130
- Newton RC → Perkins D III (1981) 78:99
- Nicholls J (1988) The statistics of Pearce element diagrams and the Chayes closure problem 99:11
- Nicholls J, Stout MZ (1982) Heat Effects of Assimilation, Crystallization, and Vesiculation in Magmas 81:328

- Nicholls J, Stout MZ (1986) Electron beam analytical instruments and the determination of modes, spatial variations of minerals and textural features of rocks in polished section 94:395-404
- Nicholls J, Stout MZ, Fiesinger DW (1982) Petrologic Variations in Quaternary Volcanic Rocks, British Columbia, and the Nature of the Underlying Upper Mantle 79:201
- Nicholls J → Russell JK (1988) 96:25
- Nickel KG, Brey G (1984) Subsolidus orthopyroxene-clinopyroxene systematics in the system $\text{CaO}-\text{MgO}-\text{SiO}_2$ to 60 kb: a reevaluation of the regular solution model 87:35
- Nickel KG, Brey GP, Kogarko L (1985) Orthopyroxene-clinopyroxene equilibria in the system $\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ (CMAS): new experimental results and implications for two-pyroxene thermometry 91:44-53
- Nickel KG → Brey GP (1986) 92:448-455
- Nicot E → Paradis S (1983) 83:342
- Nielsen Å → Holm PM (1982) 80:367
- Nielsen RL, Davidson PM, Grove TL (1986) Pyroxene-melt equilibria: an updated model 100:361-373
- Nielsen RL, Dungan MA (1983) Low pressure mineral-melt equilibria in natural anhydrous mafic systems 84:310
- Nielsen TFD (1981) The Ultramafic Cumulate Series, Gardiner Complex, East Greenland. Cumulates in a Shallow Level Magma Chamber of a Nephelinitic Volcano 76:60
- Nieva D → Calhoun M (1985) 91:235-244
- Niebet EG → Kyser TK (1986) 93:222-226
- Nixon PH → Boyd FR (1964) 96:119
- Nkomo IT → Zielinski RA (1981) 78:209
- Nolan J → Henderson P (1985) 89:263-272
- Nolan J → Lowry RK (1982) 80:254
- Nord GL Jr → McCallister RH (1981) 78:118
- Nord GL Jr → Miura Y (1981) 76:17
- Nordás J → Furnes H (1982) 79:295
- Noske-Fazekas G → Embey-Istlin A (1981) 77:325
- Novak SW, Mahood GA (1986) Rise and fall of a basalt-trachyte-rhyolite magma system at the Kane Springs Wash Caldera, Nevada 94:353-373
- Nutman AP, Bridgwater D (1986) Early Archaean Amitsoq tonalites and granites of the Isukasia area, southern West Greenland: development of the oldest-known sial 94:137-148
- Nutman AP, Bridgwater D, Fryer BJ (1984) The iron-rich suite from the Amitsoq gneisses of southern West Greenland: early Archaean plutonic rocks of mixed crustal and mantle origin 87:24
- Nyström JO (1983) Pumpellyite-Bearing Rocks in Central Sweden and Extent of Host Rock Alteration as a Control of Pumpellyite Composition 83:159
- Nyström JO (1984) Rare earth element mobility in vesicular lava during low-grade metamorphism 88:328
- Nyström JO → Levi B (1982) 80:49
- Obata M, Thompson AB (1981) Amphibole and Chlorite in Mafic and Ultramafic Rocks in the Lower Crust and Upper Mantle - A Theoretical Approach 77:74
- Obata M → Nagata J (1983) 82:42
- Oberti R → Griffin WL (1985) 91:330-339
- Ocan O → Tubosun IA (1984) 88:188
- O'Connell AF → Wintsch RP (1981) 77:207
- Offer R, Baker CK, Gamble J (1981) Pumpellyites in Two Low Grade Metamorphic Terranes North of Newcastle, NSW Australia 76:171
- Ogden P → Vollmer R (1984) 87:359
- Ohashi H → Ghose S (1986) 92:530-535
- Ohlander B, Sköld T, Hamilton PJ, Claesson LA (1987) The western border of the Archaean province of the Baltic Shield: evidence from northern Sweden 95:437-450
- Ohnenstetter D → Beccaluva L (1984) 85:253
- Ohnenstetter D → Macaudière J (1985) 89:39-51
- Ohnenstetter M → Beccaluva L (1984) 85:253
- Oka Y, Steinke P, Chatterjee ND (1984) Thermodynamic mixing properties of $\text{Mg}(\text{Al}, \text{Cr})_2\text{O}_3$ spinel crystalline solution at high temperatures and pressures 87:196
- Okamura FP → Ghose S (1986) 92:530-535
- Okay AI (1982) Incipient Blueschist Metamorphism and Metasomatism in the Tavşanlı Region, Northwest Turkey 79:361
- Okay AI, Arman MB, Göncüoğlu MC (1985) Petrology and phase relations of the kyanite-eclogites from eastern Turkey 91:196-204
- Okrusch M → Mezger K (1985) 90:353-366
- Okrusch M → Seidel E (1981) 76:351
- O'Leary MJ, Sack RO (1987) Fe-Zn exchange reaction between tetrahedrite and sphalerite in natural environments 90:415-425
- Olesch M, Seifert F (1981) The Restricted Stability of Osumilite Under Hydrous Conditions in the System $\text{K}_2\text{O}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ 76:362
- Olgaard DL, Evans B (1986) Grain growth in synthetic marbles with added mica and water 100:246-260
- Olthoff JF → Whitney PR (1988) 99:476
- Olsen KI, Griffin WL (1984) Fluid inclusion studies of the Drammen Granite, Oslo Paleorift, Norway. I. Microthermometry 87:1
- Olsen KI, Griffin WL (1984) Fluid inclusion studies of the Drammen Granite, Oslo Paleorift, Norway. II. Gas- and leachate analyses of microlytic quartz 87:15
- Olsen SN (1984) Mass-balance and mass-transfer in migmatites from the Colorado Front Range 85:30
- Olsen SN (1987) The composition and role of the fluid in migmatites: a fluid inclusion study of the Front Range rocks 96:104-120
- Olsen SN (1988) High-density CO_2 inclusions in the Colorado Front Range 100:226-235
- O'Neil JR → Brown EH (1982) 80:240
- O'Neil JR → Burkhard DJM (1986) 99:498
- O'Neil JR → Hay RL (1983) 82:403
- O'Neil JR → Kyser TK (1981) 77:11
- O'Neil JR → Kyser TK (1982) 81:88
- O'Neil JR → Kyser TK (1986) 93:120-123
- O'Neil JR → Masi U (1981) 76:116
- O'Neil JR → Sharp ZD (1986) 96:490-501
- O'Neil JR → Valley JW (1984) 85:158
- O'Neil JR → Nabelek PI (1984) 86:25
- O'Neill HStC (1981) The Transition Between Spinel Chertolite and Garnet Lherzolite, and Its Use as a Geobarometer 77:185
- O'Neill HStC → Pownceby MI (1987) 97:116-126
- O'Neill HStC → Pownceby MI (1987) 97:539
- O'Nions RK → Cohen AS (1986) 96:303-311
- Onuma K, Tohara T (1983) Effect of chromium on phase relations in the join forsterite-anorthite-diopside in air at 1 Atm 84:174
- O'Reilly SY, Griffin WL (1984) Sr isotopic heterogeneity in primitive basaltic rocks, southeastern Australia: correlation with mantle metasomatism 87:220
- O'Reilly SY → Andersen T (1984) 86:72
- Ortoleva P → Merino E (1983) 82:360
- Orville PM → Walther JV (1982) 79:252
- Osborne MD, Fleet ME, Bancroft GM (1981) $\text{Fe}^{2+}-\text{Fe}^{3+}$ Ordering in Chromite and Cr-Bearing Spinel 77:251
- Oskarsson N → Sigvaldason GE (1986) 94:263-271
- Osterdoo WH, Wark H-R (1983) Ordering and Composition of Scapolite: Field Observations and Structural Interpretations 83:330
- Ottens MT (1984) The origin of brown hornblende in the Artfjället gabbro and dolerites 86:189
- Ottens MT, Buseck PR (1987) TEM study of the transformation of augite to sodic pyroxene in eclogitized ferrogabbro 96:529-538
- Ounuchan P → AlDahan AA (1988) 100:19-34
- Ouzegane K, Fourcade S, Kienast J-R, Javoy M (1988) New carbonate complexes in the Archaean in Ouzal nucleus (Ahaggar, Algeria): mineralogical and geochemical data 98:277-292
- Ouzegane K → Bernard-Griffiths J (1988) 100:339-348
- Ozawa K (1983) Evaluation of Olivine-Spinel Geothermometry as an Indi-

- cator of Thermal History for Peridotites 82:52
- Ozawa K (1988) Ultramafic tectonite of the Miyamori ophiolite complex in the Kitakami Mountains, Northeast Japan: hydrous upper mantle in an island arc 99:159
- Padan A, Kisch HJ, Shagam R (1982) Use of the Lattice Parameter b_0 of Dioctahedral Illite/Muscovite for the Characterization of P/T Gradients of Incipient Metamorphism 79:55
- Pagel M → Juteau M (1988) 99:219
- Paktunc AD (1984) Petrogenesis of ultramafic and mafic rocks of the Thompson Nickel Belt, Manitoba 88:348
- Paktunc AD (1987) Differentiation of the Cuthbert Lake ultramafic dikes and related mafic dikes 97:405-416
- Pallister JS → Claesson S (1984) 85:244
- Palme H → Klöck W (1986) 93:273-282
- Palme H → Reimold WU (1981) 76:73
- Papike JJ → Nabelek PI (1984) 86:25
- Papike JJ → Nabelek PI (1988) 99:49
- Paquet J → Nédélec A (1981) 77:1
- Paquet J → Nédélec A (1982) 79:443
- Paradis S, Veide B, Nicot E (1983) Chloritoid-Pyrophyllite-Rectorite Facies Rocks from Brittany, France 83:342
- Paria P, Bhattacharya A, Sen SKJ (1988) The reaction garnet + clinopyroxene + quartz = 2 orthopyroxene + anorthite: A potential geobarometer for granulites 99:126
- Parker RJ → Rogers NW (1985) 90:244-257
- Parsons I, Brown WL (1983) A TEM and Microprobe Study of a Two-perthite Alkali Gabbro: Implications for the Ternary Feldspar System 82:1
- Parsons I, Brown WL (1988) Sidewall crystallization in the Klokken intrusion: zoned ternary feldspars and coexisting minerals 98:431-443
- Parsons I → Brown WL (1981) 76:369
- Parsons I → Brown WL (1983) 82:13
- Parsons I → Brown WL (1984) 86:335
- Parsons I → Brown WL (1984) 86:335
- Parsons I → Brown WL (1988) 98:444-454
- Passaglia E, Vezzadini G (1985) Crystal chemistry of diagenetic zeolites in volcanoclastic deposits of Italy 90:190-198
- Patchett J, Kouvo O (1988) Origin of continental crust of 1.9-1.7 Ga age: Nd isotopes and U-Pb zircon ages in the Svecofennian terrain of South Finland 92:1-12
- Patchett PJ, Bridgwater D (1984) Origin of continental crust of 1.9-1.7 Ga age defined by Nd isotopes in the Ketilidian terrain of South Greenland 87:311
- Patchett PJ, Kouvo O, Hegde CE, Tatsunoto M (1981) Evolution of Continental Crust and Mantle Heterogeneity: Evidence from Hf Isotopes 78:279
- Patchett PJ, Ruiz J (1987) Nd isotopic ages of crust formation and metamorphism in the Precambrian of eastern and southern Mexico 96:523-528
- Patchett PJ → Ruiz J (1988) 99:36
- Pattison DRM, Carmichael DM, St-Onge MR (1982) Geothermometry and Geobarometry Applied to Early Proterozoic "S-Type" Granitoid Plutons, Wopmay Orogen, Northwest Territories, Canada 79:394
- Paupy A → Beccaluva L (1984) 85:253
- Peacock SM (1987) Serpentinization and infiltration metasomatism in the Trinity peridotite, Klamath province, northern California: implications for subduction zones 95:55-70
- Peacor DR → Ahn JH (1988) 99:82
- Peacor DR → Isaacs AM (1981) 77:115
- Peacor DR → Kuo L-C (1986) 94:90-98
- Peacor DR → Lee JH (1984) 88:372
- Peacor DR → Newberry NG (1982) 80:334
- Peacor DR → Yau Y-C (1984) 88:299
- Peacor DR → Yau Y-C (1986) 94:127-134
- Pearce JA → Alabaster T (1982) 81:168
- Pearce JA → Tindle AG (1981) 78:198
- Pearce TH (1984) The analysis of zoning in magmatic crystals with emphasis on olivine 86:149
- Pearce TH (1987) The theory of zoning patterns in magmatic minerals using olivine as an example 97:451-459
- Pearce TH (1987) The identification and assessment of spurious trends in Pearce-type ratio variation diagrams: a discussion of some statistical arguments 97:529-534
- Pearce TH → Ernst RE (1988) 100:12-18
- Pearson NJ → Green TH (1985) 91:24-36
- Peccerillo A, Poli G, Tolomeo L (1984) Genesis, evolution and tectonic significance of K-rich volcanics from the Alban Hills (Roman comagmatic region) as inferred from trace element geochemistry 86:230
- Peccerillo A → Barbieri M (1988) 99:485
- Peccerillo A → Bellieni G (1981) 78:145
- Peccerillo A → Civetta L (1981) 78:37
- Peccerillo A → De Fino M (1986) 92:135-145
- Peck DL → Kistler RW (1986) 94:205-220
- Pedersen AK (1981) Armalcolite-Bearing Fe-Ti Oxide Assemblages in Graphite-Equilibrated Sulfidic Volcanic Rocks with Native Iron from Disko, Central West Greenland 77:307
- Pedersen AK, Rensbo JG (1987) Oxygen deficient Ti oxides (natural magnetite phases) from mudstone xenoliths with native iron from Disko, central West Greenland 96:35-46
- Pedersen RB, Malpas J (1984) The origin of oceanic plagiogranites from the Karmøy ophiolite, Western Norway 88:36
- Pedersen RB → Dunning GR (1988) 98:13-23
- Pedersen RB → Maslee S (1988) 98:401-407
- Pedersen S → Springer N (1983) 82:26
- Pegram E → Jackson NJ (1984) 87:205
- Pe-Piper G → Clarke DB (1983) 83:117
- Peraudeau G → McMillan P (1986) 1986:178-182
- Perfit MR → Gust DA (1987) 97:7-18
- Perkins D → Chipera SJ (1988) 98:40-48
- Perkins D III, Chipera SJ (1985) Garnet-orthopyroxene-plagioclase-quartz barometry: refinement and application to the English River subprovince and the Minnesota River valley 89:69-80
- Perkins D III, Holland TJB, Newton RC (1981) The Al_2O_3 Contents of Enstatite in Equilibrium with Garnet in the System $MgO-Al_2O_3-SiO_2$ at 15-40 kbar and 900-1,600 °C 78:99
- Peterman ZE, Sims PK, Zartman RE, Schulz KJ (1985) Middle Proterozoic uplift events in the Dunbar dome of northeastern Wisconsin, USA 91:138-150
- Peterman ZE → Zielinski RA (1981) 78:209
- Peters T (1986) Structurally incorporated and water extractable chlorine in the Boettstein granite (N. Switzerland) 94:272-273
- Peters T → Capitani C de (1981) 76:394
- Peters T → Capitani C de (1982) 81:48
- Pettingill HS, Sinha AK, Tatsunoto M (1984) Age and origin of anorthositic, charnockitic, and granulites in the Central Virginia Blue Ridge: Nd and Sr isotopic evidence 85:279
- Peucat J-J → Deniel C (1987) 96:78-92
- Peucat JJ → Bernard-Griffiths J (1988) 100:339-348
- Phelps DW, Gust DA, Wooden JL (1983) Petrogenesis of the mafic feldspathoidal lavas of the Raton Clayton volcanic field, New Mexico 84:182
- Philpotts AR (1982) Compositions of Immiscible Liquids in Volcanic Rocks 80:201
- Phinney WC → Ashwal LD (1983) 82:259
- Piccarro GB → Messina B (1983) 83:1
- Piccarreta G → De Fino M (1986) 92:135-145
- Piccirillo EM → Cundari A (1986) 94:523-532
- Piccirillo EM → Dal Negro A (1984) 86:221
- Piccirillo EM → Dal Negro A (1986) 92:35-43
- Pichavant M (1981) An Experimental Study of the Effect of Boron on a Water Saturated Haplogranite at 1 Kbar Vapour Pressure - Geological Applications 76:430
- Pichavant M, Kontak DJ, Briquet L, Valencia Herrera J, Clark AH (1988) The Miocene-Pliocene Macusani Volcanics, SE Peru. II. Geochemistry and origin of a felsic peraluminous magma 100:325-338
- Pichavant M, Kontak DJ, Valencia Herrera J, Clark AH (1988) The Miocene-Pliocene Macusani Volcanics, SE Peru. I. Mineralogy and magmatic evolution of a two-mica aluminosilicate-bearing ignimbrite suite 100:300-324
- Pierce TA → Don Hermes O (1984) 86:386

- Pin C, Carme F (1987) Sm-Nd isotopic study of 500 Ma old oceanic crust in the Variscan belt of Western Europe: the Chamrousse ophiolite complex, Western Alps (France) 96:405-413
- Pin C, Lancelot J (1982) U-Pb Dating of an Early Paleozoic Bimodal Magmatism in the French Massif Central and of its Further Metamorphic Evolution 79:1
- Pineau F → Javoy M (1986) 92:225-235
- Plant AG → Robertson PB (1981) 78:12
- Plyusina LP (1982) Geothermometry and Geobarometry of Plagioclase-Hornblende Bearing Assemblages 80:149
- Poli G → Barbieri M (1988) 99:485
- Poli G → Bellieni G (1981) 78:145
- Poli G → Civetta L (1981) 78:37
- Poli G → De Fino M (1986) 92:135-145
- Poli G → Peccerillo A (1984) 86:230
- Poli S, Chiesa S, Gillot P-Y, Gregnani A, Guichard F (1987) Chemistry versus time in the volcanic complex of Ischia (Gulf of Naples, Italy): evidence of successive magmatic cycles 95:322-335
- Potts PJ → Venturelli G (1984) 86:209
- Powell R, Sandford M (1986) Sapphirine and spinel phase relationships in the system $\text{FeO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{TiO}_2-\text{O}_2$ in the presence of quartz and hypersthene 88:64-71
- Powell R → Freestone IC (1983) 82:291
- Powell R → Sandford M (1987) 95:217-225
- Powers RE, Bohlen SR (1985) The role of synmetamorphic igneous rocks in the metamorphism and partial melting of metasediments, Northwest Adirondacks 90:401-409
- Pownceby MJ, Wall VJ, O'Neill HSC (1987) Fe-Mn partitioning between garnet and ilmenite: experimental calibration and applications 97:115-126
- Pownceby MJ, Wall VJ, O'Neill HSC (1987) Fe-Mn partitioning between garnet and ilmenite: experimental calibration and applications (Erratum) 97:539
- Prime WKB → Hansen EC (1987) 96:225-244
- Preite-Martinez M → Ferrara G (1986) 92:269-280
- Presnall DC, Hoover JD (1984) Composition and depth of origin of primary mid-ocean ridge basalts 87:170
- Presnall DC, Hoover JD (1986) Composition and depth of origin of primary mid-ocean ridge basalts - reply to D. Elthon 94:257-261
- Presnall DC → Sen G (1984) 85:404
- Price JG → Henry CD (1988) 98:194-211
- Price RC, Johnson RW, Gray CM, Frey FA (1985) Geochemistry of phonolites and trachytes from the summit region of Mt. Kenya 89:394-409
- Prichard HM, Cann JR (1982) Petrology and Mineralogy of Dredged Gabbro from Gertysburg Bank, Eastern Atlantic 79:48
- Pride C, Moore JM Jr (1983) Petrogenesis of the Elzevir Batholith and Related Trondhjemitic Intrusions in the Grenville Province of Eastern Ontario, Canada 82:187
- Pride C, Muecke GK (1981) Rare Earth Element Distributions Among Coexisting Granulite Facies Minerals, Scourian Complex, NW Scotland 76:483
- Pride C, Muecke GK (1982) Geochemistry and Origin of Granitic Rocks, Scourian Complex, NW Scotland 80:379
- Puhan D (1984) Microtexture of dolomite within exsolved magnesite calcite - examples from the Damara orogen (Namibia) 87:98
- Puhan D (1988) Reverse age relations of talc and tremolite deduced from reaction textures in metamorphosed siliceous dolomites of the southern Damara Orogen (Namibia) 98:24-27
- Futnis A, Holland TJB (1986) Sector zoning in cordierite and equilibrium overstepping in metamorphism 93:265-272
- Puustinen K → Kröner A (1981) 78:33
- Puzos M → Del Moro A (1982) 81:340
- Puziewicz J, Johannes W (1988) Phase equilibria and compositions of Fe-Mg-Al minerals and melts in water-saturated peraluminous granitic systems 100:156-168
- Querré G → Martin H (1984) 85:292
- Quick JE (1981) The Origin and Significance of Large, Tabular Dunite Bodies in the Trinity Peridotite, Northern California 78:413
- Raczek I → Folland KA (1988) 98:408-416
- Raczek I → Hofmann AW (1984) 88:24
- Raczek I → Hofmann AW (1987) 95:114-122
- Raczek I → Lippolt HJ (1983) 84:272
- Raczek I → Schleicher H, Lippolt HJ (1983) 84:281
- Radain AAM, Fyfe WS, Kerrich R (1981) Origin of Porphyritic Granites of Saudi Arabia 78:358
- Radicati di Brozolo F → Del Moro A (1982) 81:340
- Ragland PC → Drummond MS (1986) 93:98-113
- Rahaman MA → Tuboseun IA (1984) 88:188
- Raith M → Braun E (1985) 90:199-213
- Ramakrishnan M → Rollinson HR (1981) 76:420
- Ramsay WRH, Crawford AJ, Foden JD (1984) Field setting, mineralogy, chemistry, and genesis of arc picrites, New Georgia, Solomon Islands 88:386
- Ransom BL → Wintch RP (1981) 77:207
- Rao BV → Ripley EM (1982) 80:230
- Rao JM → Don Hermes O (1984) 86:386
- Rapp RP, Watson EB (1986) Monazite solubility and dissolution kinetics: implications for the thorium and light rare earth chemistry of felsic magmas 94:304-316
- Raschka H → Seidel E (1981) 76:351
- Reagan M → Meijer A (1981) 77:337
- Reagan MK → Hickey-Vargas R (1987) 97:497-506
- Reed SJB → Hendry DAF (1981) 78:404
- Reed SJB → Hendry DAF (1985) 89:317-329
- Reeder RJ (1981) Electron Optical Investigation of Sedimentary Dolomites 76:148
- Reeder RJ → Barber DJ (1985) 91:82-92
- Reeves KD → Nelson DO (1987) 97:172-92
- Reid AM → Roex AP le (1985) 90:367-380
- Reid JB Jr, Hamilton MA (1987) Origin of Sierra Nevada granite: evidence from small scale composite dikes 96:441-454
- Reimold WJ, Grieve RAF, Palme H (1981) Rb-Sr Dating of the Impact Melt from East Clearwater, Quebec 76:73
- Reinecke T (1982) Cymrite and Celsian in Manganese-Rich Metamorphic Rocks from Andros Island/Greece 79:333
- Reinecke T (1986) Crystal chemistry and reaction relations of piemontites and thulites from highly oxidized low grade metamorphic rocks at Vitali, Andros Island, Greece 93:56-76
- Reinecke T (1986) Phase relationships of sursassite and other Mn-silicates in highly oxidized low-grade, high-pressure metamorphic rocks from Evvia and Andros Islands, Greece 94:110-126
- Reny G → Grieve RAF (1987) 96:56-62
- Rettig SL → Spencer RJ (1984) 86:321
- Reuter A (1987) Implications of K-Ar ages of whole-rock and grain-size fractions of metapelites and intercalated metatuffs within an anchizone terrane 97:105-115
- Reuter A, Dallmeyer RD (1987) $^{40}\text{Ar}/^{39}\text{Ar}$ dating of cleavage formation in tuffs during anchizone metamorphism 97:352-360
- Rex DC → Clifford TN (1981) 77:225
- Reymer APS, Matthews A, Navon O (1984) Pressure-temperature conditions in the Wadi Kid metamorphic complex: implications for the pan-african event in SE Sinai 85:336
- Ribbe PH → Nakajima Y (1981) 78:230
- Ricci CA → Franceschelli M (1982) 80:285
- Ricci CA → Franceschelli M (1986) 93:137-143
- Richardson SH → Staudigel H (1981) 77:150
- Rieder M → Senc I (1983) 84:73
- Rietmeijer FJM (1983) Inter-Diffusion Coefficients Parallel to the c-Axis in Iron-Rich Clinopyroxenes Calculated from Microstructures 83:169
- Ripley EM, Rao BV, Berkley JL (1982) Mineralogical and Chemical Variations Within Layered Sills of the Deer Lake Complex, Minnesota 80:230
- Rivalenti G → Voshage H (1988) 100:261-267

- Rivers ML → Ghiorso MS (1984) 84:107
 Rivers ML → Kilinc A (1983) 83:136
 Roberts CR → Rollinson HR (1986) 93:89-97
 Roberts CR → Rollinson HR (1987) 97:527-528
 Robertson PB, Plant AG (1981) Shock Metamorphism in Sillimanite from the Haughton Impact Structure, Devon Island, Canada 78:12
 Robins B (1982) Finger Structures in the Lille Kufford Layered Intrusion, Finnmark, Northern Norway 81:290
 Robins B (1984) Petrography and petrogenesis of nephelinitized metagabbros from Finnmark, Northern Norway 86:170
 Robinson DN → Shee SR (1982) 81:79
 Rock NMS (1982) Chemical Mineralogy of the Monchique Alkaline Complex, Southern Portugal 81:64
 Roden MF (1981) Origin of Coexisting Minette and Ultramafic Breccia, Navajo Volcanic Field 77:195
 Roden MK, Hart SR, Frey FA, Melson WG (1984) Sr, Nd and Pb isotopic and REE geochemistry of St. Paul's Rocks: the metamorphic and metasomatic development of an alkali basalt mantle source 85:376
 Roedder E (1983) Discussion of "A Re-Assessment of Phase Equilibria Involving Two Liquids in the System $K_2O-Al_2O_3-FeO-SiO_2$," by G.M. Biggar 82:284
 Roelandts I → Ducheane JC (1985) 90:214-225
 Roeber EWF de, Lattard D, Schreyer W (1981) Surinamite: A Beryllium-Bearing Mineral 78:472
 Roex AP le, Dick HJB, Reid AM, Frey FA, Erlank AJ, Hart SR (1985) Petrology and geochemistry of basalts from the American-Antarctic Ridge, southern Ocean: Implications for the westward influence of the Bouvet mantle plume 90:367-380
 Roex AP le, Erlank AJ, Needham HD (1981) Geochemical and Mineralogical Evidence for the Occurrence of at Least Three Distinct Magma Types in the 'Famous' Region 77:24
 Roex AP le → Heerden LA van (1986) 100:47-60
 Rogers NW, Hawkesworth CJ, Parker RJ, Marsh JS (1985) The geochemistry of potassic lavas from Vulsini, central Italy and implications for mantle enrichment processes beneath the Roman region 90:244-257
 Rogers NW → Colish RA (1987) 97:51-65
 Roggwiler P → Hunziker JC (1986) 92:157-180
 Roisenberg A → Fodor RV (1985) 91:54-65
 Rollinson HR, Roberts CR (1986) Ratio correlations and major element mobility in altered basalts and komatiites 93:89-97
 Rollinson HR, Roberts CR (1987) Ratio correlations and major element mobility in altered basalts and komatiites - reply to K.J. Vines 97:527-528
 Rollinson HR, Windley BF, Ramakrishnan M (1981) Contrasting High and Intermediate Pressures of Metamorphism in the Archaean Sargur Schists of Southern India 76:420
 Rensbo JG → Pedersen AK (1987) 96:35-46
 Rosenbaum JM → Negga HS (1986) 93:179-186
 Rosholt JN → Zielinski RA (1981) 78:209
 Ross C → Cao Rong-long (1986) 93:160-167
 Ross JA, Sharp WD (1986) The effects of sub-blocking temperature metamorphism on the K/Ar systematics of hornblendes: $^{40}Ar/^{39}Ar$ dating of poly-metamorphic garnet amphibolite from the Franciscan Complex, California 100:213-221
 Rossi G, Smith DC, Ungaretti L, Domeneghetti MC (1983) Crystal-Chemistry and Cation Ordering in the System Diopside-Jadeite: A Detailed Study by Crystal Structure Refinement 83:247
 Rossi G → Griffin WL (1985) 91:330-339
 Roy S → Bhattacharyya PK (1984) 87:65
 Rubenstein JL → Mahiburg Kay S (1983) 82:99
 Rubie DC, Gunter WD (1983) The Role of Speciation in Alkaline Igneous Rocks During Fenite Metasomatism 82:165
 Rubin M → Spencer RJ (1984) 86:321
 Rubury E → Basu AR (1984) 86:35
 Rucklidge J → Miura Y (1981) 78:17
 Rudnick RL, Ashwal LD, Henry DJ (1984) Fluid inclusions in high-grade gneisses of the Kapuskasing structural zone, Ontario: metamorphic fluids and uplift/erosion path 87:399
 Ruiz J, Patchett PJ, Arculus RJ (1988) Nd-Sr isotope composition of lower crustal xenoliths - Evidence for the origin of mid-tertiary felsic volcanics in Mexico 99:36
 Ruiz J → Patchett PJ (1987) 96:523-528
 Rumble D III, Ferry JM, Hoering TC (1986) Oxygen isotope geochemistry of hydrothermally-altered synmetamorphic granitic rocks from South-Central Maine, USA 93:420-428
 Rumble D III → Baumgartner LP (1986) 96:417-430
 Rumble D III → Duke EF (1986) 93:409-419
 Russell JK, Nicholls J (1988) Analysis of petrologic hypotheses with Pearce element ratios 99:25
 Ryabchikov ID, Schreyer W, Abraham K (1982) Compositions of Aqueous Fluids in Equilibrium with Pyroxenes and Olivines at Mantle Pressures and Temperatures 79:80
 Ryabenko VA → Grieve RAF (1987) 96:56-62
 Ryan CG → Griffin WL (1988) 99:143
 Sachtleben Th, Seck HA (1981) Chemical Control of Al-Solubility in Orthopyroxene and its Implications on Pyroxene Geothermometry 78:157
 Sack RO (1982) Spinels as Petrogenetic Indicators: Activity-Composition Relations at Low Pressures 79:169
 Sack RO, Carmichael ISE (1984) Fe^{2+} , Mg^{2+} and $TiAl_{1/2}MgSi_{1/2}$ exchange reactions between clinopyroxenes and silicate melts 85:103
 Sack RO, Walker D, Carmichael ISE (1987) Experimental petrology of alkaline lavas: constraints on cotectics of multiple saturation in natural basic liquids 96:1-23
 Sack RO → Ghiorso MS (1984) 84:107
 Sack RO → Kilinc A (1983) 83:136
 Sack RO → O'Leary MJ (1987) 96:415-425
 Saieeb JB → Shaw HF (1987) 96:281-290
 Salje E, Werneke Chr (1982) The Phase Equilibrium Between Sillimanite and Andalusite as Determined from Lattice Vibrations 79:56
 Šanc I, Rieder M (1983) Lamellar Pyroxenes and Their Petrogenetic Significance: Three Examples from the Czech Massif 84:73
 Sanders IS (1986) Plagioclase breakdown and regeneration reactions in Grenville kyanite eclogite at Glenelg, NW Scotland 95:33-39
 Sandiford M, Neall FB, Powell R (1987) Metamorphic evolution of aluminous granulites from Labwor Hills, Uganda 95:217-225
 Sandiford M → Grew ES (1984) 87:337
 Sandiford M → Powell R (1988) 98:64-71
 Sando TW → Grove TL (1982) 80:160
 Sando TW → Grove TL (1983) 82:407
 Santosh M (1987) Cordierite gneisses of southern Kerala, India: petrology, fluid inclusions and implications for crustal uplift history 98:343-356
 Satake H, Matsuo S (1984) Hydrogen isotopic fractionation factor between brucite and water in the temperature range from 100° to 510° C 86:19
 Sauvan P → Moine B (1981) 76:401
 Savage D, Cave MR, Milodowski AE, George I (1987) Hydrothermal alteration of granite by meteoric fluid: an example from the Carnmenellis Granite, United Kingdom 96:391-405
 Saxena SK (1981) Fictive Component Model of Pyroxenes and Multicomponent Phase Equilibria 78:345
 Saxena SK, Fei Y (1987) Fluids at crustal pressures and temperatures. I. Pure species 95:370-375
 Saxena SK → Fei Y (1986) 94:221-229
 Scarfe CM → Brearley M (1984) 88:53
 Scarfe CM → Fujii T (1982) 80:297
 Scarfe CM → Fujii T (1985) 90:18-28
 Schaaf RB (1982) Disequilibrium Features in Experimentally Shocked Mixtures of Olivine Plus Silica Glass Powders 81:39
 Schäfer K → Schumacher JC (1987) 95:182-190

- Schärer U, Krogh TE, Gower CF (1986) Age and evolution of the Grenville Province in eastern Labrador from U-Pb systematics in accessory minerals 94:435-451
- Scheie Å → Maaløe S (1982) 81:350
- Schilling J-G → Neumann E-R (1984) 85:209
- Schilling J-G → Vollmer R (1984) 87:359
- Schleicher H, Lippolt HJ (1981) Magmatic Muscovite in Felsitic Parts of Rhyolites from Southwest Germany 78:220
- Schleicher H → Lippolt HJ (1983) 84:272
- Schleicher H, Lippolt HJ, Raczek I (1983) Rb-Sr systematics of Permian volcanics in the Schwarzwald (SW-Germany). Part II: Age of eruption and the mechanism of Rb-Sr whole rock age distortions 84:281
- Schliestedt M, Johannes W (1984) Melting and subsolidus reactions in the system $K_2O-CaO-Al_2O_3-SiO_2-H_2O$: corrections and additional experimental data 88:403
- Schliestedt M, Matthews A (1987) Transformation of blueschist to greenschist facies rocks as a consequence of fluid infiltration, Sifnos (Cyclades), Greece 97:237-250
- Schliestedt M → Matthews A (1984) 88:150
- Schmincke H-U → Duda A (1985) 91:340-353
- Schmincke H-U → Martes H (1985) 89:330-345
- Schmincke H-U → Wörner G (1983) 84:152
- Schmitt RA → Warner RD (1985) 90:385-400
- Schneider A → Haack U (1984) 85:116
- Schreurs J, Westra L (1986) The tectonic evolution of a Proterozoic, low pressure, granulite dome, West Usimaa, SW Finland 93:236-250
- Schreyer W (1988) A discussion of: Corundum, Cr-muscovite rocks at O'Briens, Zimbabwe: the conjunction of hydrothermal desilicification and LIL element enrichment - geochemical and isotopic evidence" by Kerrich et al. 100:552-554
- Schreyer W, Franolet A-M, Abraham K (1986) A miscibility gap in trioctahedral Mn-Mg-Fe chlorites: evidence from the Liéne Valley manganese deposit, Ardennes, Belgium 94:333-342
- Schreyer W, Horrocks PC, Abraham K (1984) High-magnesian staurolite in a sapphirine-garnet rock from the Limpopo Belt, Southern Africa 86:200
- Schreyer W, Medenbach O (1981) CO_2 -Rich Fluid Inclusions Along Planar Elements of Quartz in Basement Rocks of the Vrededorp Dome, South Africa 77:93
- Schreyer W, Medenbach O, Abraham K, Gebert W, Müller WF (1982) Kuikale, a New Metamorphic Phyllosilicate Mineral: Ordered 1:1 Chlorite/Talc Mixed-Layer 80:103
- Schreyer W → Abraham K (1983) 82:252
- Schreyer W → Armbruster Th (1982) 81:262
- Schreyer W → Franolet A-M (1984) 86:409
- Schreyer W → Gordillo CE (1985) 90:93-101
- Schreyer W → Hölcher A (1986) 92:113-127
- Schreyer W → Lattard D (1983) 84:199
- Schreyer W → Massonne H-J (1987) 96:212-224
- Schreyer W → Roever EWF de (1981) 76:472
- Schreyer W → Ryabchikov ID (1982) 79:80
- Schultz-Güttler R (1986) The influence of disordered, non-equilibrium dolomites on the Mg-solubility in calcite in the system $CaCO_3-MgCO_3$ 93:395-398
- Schulz KJ → Peterman ZE (1985) 91:136-150
- Schumacher JC, Schäfer K, Seifert F (1987) Lamellar nigerite in Zn-rich spinel from the Falun deposit, Sweden 95:182-190
- Schuster AK → Hoefs J (1982) 79:241
- Schwander H → Hunziker JC (1986) 92:157-160
- Secco I → Cundari A (1986) 94:523-532
- Seck HA → Droll K (1984) 88:276
- Seck HA → Sachtleben Th (1981) 78:157
- Seidel E, Okrusch M, Kreuzer H, Raschka H, Harre W (1981) Eo-Alpine Metamorphism in the Uppermost Unit of the Cretan Nappe System: Petrology and Geochronology - Part 2. Synopsis of High-Temperature Metamorphics and Associated Ophiolites 76:351
- Seifert F → Annersten H (1981) 77:158
- Seifert F → Olesch M (1981) 78:362
- Seifert F → Schumacher JC (1987) 95:182-190
- Seifert FA → Spiering B (1985) 90:63-73
- Sekine T, Wyllie PJ (1982) Phase Relationships in the System $KAlSi_3O_8-Mg_2SiO_5-SiO_2-H_2O$ as a Model for Hybridization Between Hydrous Siliceous Melts Peridotite 79:368
- Sekine T, Wyllie PJ (1982) The System Granite-Peridotite- H_2O at 30 kbar, with Applications to Hybridization in Subduction Zone Magmatism 81:190
- Sekine T → Wyllie PJ (1982) 79:375
- Selverstone J (1982) Fluid Inclusions as Petrogenetic Indicators in Granulite Xenoliths, Pali-Aike Volcanic Field, Chile 79:28
- Selverstone J, Munoz JL (1987) Fluid heterogeneities and hornblende stability in interlayered graphitic and nongraphitic schists (Tauern Window, Eastern Alps) 96:425-440
- Selverstone J → Spear FS (1983) 83:348
- Sen G (1988) Petrogenesis of spinel ilmenite and pyroxene suite xenoliths from the Koolau shield, Oahu, Hawaii: Implications for petrology of the post-eruptive lithosphere beneath Oahu 100:61-91
- Sen G, Presnall DC (1984) Liquidus phase relationships on the join anorthite-forsterite-quartz at 10 kbar with applications to basalt petrogenesis 85:404
- Sen SK, Bhattacharya A (1984) An orthopyroxene-garnet thermometer and its application to the Madras charnockites 86:64
- Sen SK → Bhattacharya A (1985) 89:370-378
- Sen SKJ → Paria P (1986) 99:126
- Sethna SF → Lightfoot PC (1987) 95:44-54
- Shagam R → Padan A (1982) 79:85
- Sharma RS, MacRae ND (1981) Paragenetic Relations in Gedrite-Cordierite-Staurolite-Biotite-Sillimanite-Kyanite Gneisses at Aijitpur, Rajasthan, India 78:48
- Sharp WD → Ross JA (1986) 100:213-221
- Sharp ZD, O'Neill JR, Essene EJ (1988) Oxygen isotope variations in granulite-grade iron formations: constraints on oxygen diffusion and retrograde isotopic exchange 96:490-501
- Shaw HF, Chen JH, Saleeby JB, Wasserburg GJ (1987) Nd-Sr-Pb systematics and age of the Kings River ophiolite California: implications for depleted mantle evolution 96:281-290
- Shree SR, Gurney JJ, Robinson DN (1982) Two Diamond-Bearing Peridotite Xenoliths from the Finsch Kimberlite, South Africa 81:79
- Shepherd TJ → Beddoe-Stephens B (1983) 83:278
- Sheppard SMF, Harris C (1985) Hydrogen and oxygen isotope geochemistry of Ascension Island lavas and granites: variation with crystal fractionation and interaction with sea water 91:74-81
- Sheppard SMF → Negga HS (1986) 93:179-186
- Sheraton JW, Black LP (1981) Geochemistry and Geochronology of Proterozoic Tholeiite Dykes of East Antarctica: Evidence for Mantle Metasomatism 78:305
- Sheraton JW, Collinson KD (1984) Geochemical evolution of Archaean granulite-facies gneisses in the Vestfold Block and comparisons with other Archaean gneiss complexes in the East Antarctic Shield 87:51
- Sheridan MF → Christiansen EH (1983) 83:16
- Shibata T, Thompson G (1986) Peridotites from the Mid-Atlantic Ridge at 43° N and their petrogenetic relation to abyssal tholeiites 93:144-159
- Shimizu H → Terakado Y (1988) 99:1
- Shiraki K → Kuroda N (1988) 100:129-138
- Sial AN → Long LE (1986) 92:341-350
- Sie SH → Griffin WL (1988) 99:143
- Siegenthaler R → Cohen AS (1986) 98:303-311
- Siena F → Sinigoi S (1983) 82:351
- Sighinolfi GP, Figueredo MCH, Fyfe WS, Kronberg BI, Tanner Oliveira MAF

- (1981) *Geochemistry and Petrology of the Jeju Granulitic Complex (Brazil): An Archean Basement Complex* 78:263
- Sigvaldason GE, Oskarsson N (1986) Fluorine in basalts from Iceland 94:263-271
- Sillis JD → Exley RA (1982) 81:59
- Silver LT → Hill RI (1986) 92:351-361
- Simmons G → Caruso L (1985) 90:1-17
- Sims PK → Peterman ZE (1985) 91:138-150
- Singer BS, Kudo AM (1986) Assimilation-fractional crystallization of Polvadera Group rocks in the Northwestern Jemez Volcanic Field, New Mexico 94:374-386
- Sinha AK → Ayuso RA (1984) 88:113
- Sinha AK → Myers JD (1985) 91:221-234
- Sinha AK → Myers JD (1986) 94:1-11
- Sinha AK → Pettingill HS (1984) 85:279
- Sinha AK → Wayne DM (1988) 98:109-121
- Sinigoi S, Comin-Chiaromonte P, Demarchi G, Siena F (1983) Differentiation of Partial Melts in the Mantle: Evidence from the Balmuccia Peridotite, Italy 82:351
- Sinigoi S → Voishage H (1988) 100:261-267
- Sinton JM → Christie DM (1986) 94:274-288
- Sisl J-C → Martignole J (1981) 77:38
- Sisson VB (1987) Halogen chemistry as an indicator of metamorphic fluid interaction with the Ponder pluton, Coast Plutonic Complex, British Columbia, Canada 95:123-131
- Sisson VB, Crawford ML, Thompson PH (1981) CO₂-Brine Immiscibility at High Temperatures, Evidence from Calcareous Metasedimentary Rocks 78:371
- Sivaprakash C (1981) Petrology of Calc-Silicate Rocks from Koduru, Andhra Pradesh, India 77:121
- Sivell WJ (1986) A basaltic-ferrobasaltic granulite association, Oonagabai gneiss complex, Central Australia: magmatic variation in an Early Proterozoic rift 93:381-394
- Skiöld T → Öhlander B (1987) 95:437-450
- Skippen G, McKinstry BW (1985) Synthetic and natural tremolite in equilibrium with forsterite, enstatite, diopside and fluid 89:256-262
- Skippen G → Trommsdorff V (1985) 89:24-29
- Skippen G → Trommsdorff V (1986) 94:317-322
- Skippen GB → Abercrombie HJ (1987) 97:305-312
- Skulski T, Hynes A, Francis D (1988) Basic lavas of the Archean La Grande Greenstone belt: Products of polybaric fractionation and crustal contamination 100:236-245
- Smedley PL (1988) The geochemistry of Dinantian volcanism in south Kintyre and the evidence for provincialism in the southern Scottish mantle 99:374
- Smith D (1987) Genesis of carbonate in pyrope from ultramafic diatremes on the Colorado Plateau, southwestern United States 97:389-396
- Smith D, Ehrenberg SN (1984) Zoned minerals in garnet peridotite nodules from the Colorado Plateau: implications for mantle metasomatism and kinetics 86:274
- Smith D → Hunter WC (1981) 76:312
- Smith D → Tyner GN (1986) 94:63-71
- Smith DC → Franz G (1986) 92:71-85
- Smith DC → Ross G (1983) 83:247
- Smith DJ → Barber DJ (1985) 91:82-92
- Smith IEM → Barsdell M (1982) 81:148
- Smith JV → Dawson JB (1987) 95:376-383
- Smith JV → Dawson JB (1988) 100:510-527
- Smith JV → Exley RA (1982) 81:59
- Smith JV → Hervig RL (1982) 81:184
- Smith PE, Tatsumoto M, Farquhar RM (1987) Zircon Lu-Hf systematics and the evolution of the Archean crust in the southern Superior Province, Canada 97:93-104
- Smyth RC → Henry CD (1988) 98:194-211
- Snipes DS → Warner RD (1985) 90:386-400
- Sommerauer J, Katz-Lehnert K (1985) Trapped phosphate melt inclusions in silicate-carbonate-hydroxyapatite from combiayer alvikites from the Kaiserstuhl carbonatite complex (SW-Germany) 91:354-359
- Sommerauer J, Katz-Lehnert K (1985) A new partial substitution mechanism of CO₃²⁻/CO₃OH⁻ and SiO₄²⁻ for the PO₄³⁻ group in hydroxyapatite from the Kaiserstuhl alkaline complex (SW-Germany) 91:360-368
- Sorensen SS → Jacobson CE (1986) 92:308-315
- Sotin C → Bertrand P (1986) 93:168-178
- Spadea P → Cortesogno L (1984) 85:14
- Spark RSJ, Huppert HE (1984) Density changes during the fractional crystallization of basaltic magmas: fluid dynamic implications 85:300
- Sparks RSJ (1986) Petrology and geochemistry of the Loch Ba ring-dyke, Mull (N.W. Scotland): an example of the extreme differentiation of tholeiitic magmas 100:446-461
- Sparks RSJ → Hunter RH (1987) 95:451-461
- Spear FS (1981) Amphibole-Plagioclase Equilibria: An Empirical Model for the Relation Albite + Tremolite = Edenite + 4 Quartz 77:355
- Spear FS (1988) Thermodynamic projection and extrapolation of high-variance mineral assemblages 98:346-351
- Spear FS (1988) The Gibbs method and Duhem's theorem: The quantitative relationships among P, T, chemical potential, phase composition and reaction progress in igneous and metamorphic systems 99:249
- Spear FS (1988) Metamorphic fractional crystallization and internal metasomatism by diffusional homogenization of zoned garnets 99:507
- Spear FS, S-Ilverstone J (1983) Quantitative P-T Paths from Zoned Minerals: Theory and Tectonic Applications 83:348
- Spear FS → Crowley PD (1987) 95:512-522
- Spear FS → Kimball KL (1985) 91:307-320
- Speer JA → Evans NH (1984) 87:297
- Spencer RJ, Baedeker MJ, Eugster HP, Forester RM, Goldhaber MB, Jones BF, Kelts K, McKenzie J, Madsen DB, Rettig SL, Rubin M, Bowser CJ (1984) Great Salt Lake, and precursors, Utah: the last 30,000 years 86:321
- Spengler SR, Garcia MO (1988) Geochemistry of the Hawaii lavas, Kohala Volcano, Hawaii 99:90
- Spera FJ (1981) Carbon Dioxide in Igneous Petrogenesis: II. Fluid Dynamics of Mantle Metasomatism 77:56
- Spera FJ (1984) Carbon dioxide in petrogenesis III: role of volatiles in the ascent of alkaline magma with special reference to xenolith-bearing mafic lavas 88:217
- Spera FJ → Crisp JA (1987) 96:503-518
- Spera FJ → Feigenson MD (1983) 84:390
- Spiering B, Seifert FA (1985) Iron in silicate glasses of granitic composition: a Mössbauer spectroscopic study 90:63-73
- Spörl KB → Barsdell M (1982) 81:148
- Spray JG (1986) Generation and crystallization of an amphibolite shear melt: an investigation using radial friction welding apparatus 99:464
- Springer N, Pedersen S, Bridgwater D, Glassley WE (1983) One Dimensional Diffusion of Radiogenic ⁸⁷Sr and Fluid Transport of Volatile Elements Across the Margin of a Metamorphosed Archean Basic Dyke from Saglek, Labrador 82:26
- Srogi LA → Lutz TM (1988) 98:212-223
- Stabel A → Mark MBE (1988) 99:344
- Stacey JS, Stoesser DB (1983) Distribution of Oceanic and Continental Leads in the Arabian-Nubian Shield 84:91
- Stamatopoulou-Seymour K, Francis D, Ludden J (1983) The Petrogenesis of the Lac Guyer Komatiites and Basalts and the Nature of the Komatiite-Komatiite Basalt Compositional Gap 84:6
- Starmer IC → Milne KP (1982) 79:381
- Staudigel H, Bryan WB (1981) Contrasted Glass-Whole Rock Compositions and Phenocryst Re-Distribution, IPOD Sites 417 and 418 78:255
- Staudigel H, Muehlenbachs K, Richardson SH, Hart SR (1981) Agents of Low Temperature Ocean Crust Alteration 77:150
- Staudigel H → Graham DW (1988) 99:446
- Stebbins JF, Carmichael ISE, Moret LK (1984) Heat capacities and entropies of silicate liquids and glasses 86:131

- Stebbins JF, Weill DF, Carmichael ISE, Moret LK (1982) High Temperature Heat Contents and Heat Capacities of Liquids and Glasses in the System $\text{NaAlSi}_3\text{O}_8 - \text{CaAl}_2\text{Si}_2\text{O}_7$ 80:276
- Stein KJ → Hannah JL (1986) 93:347-358
- Steiner JC → Warner RD (1985) 90:386-400
- Steinke P → Oka Y (1984) 87:196
- Steltenpohl MG, Bartley JM (1987) Thermobarometric profile through the Caledonian nappe stack of Western Ofoten, North Norway 96:93-103
- Stephens WE, Whitley JE, Thirlwall MF, Halliday AN (1985) The Criffell zoned pluton: correlated behaviour of rare earth element abundances with isotopic systems 89:225-238
- Stern RJ, Bibee LD (1984) Esmeralda Bank: Geochemistry of an active submarine volcano in the Mariana Island Arc 86:159
- Stern RJ, Gottfried D (1986) Petrogenesis of a Late Precambrian (575-600 Ma) bimodal suite in Northeast Africa 92:492-501
- Stern WB → Frey M (1983) 83:186
- Stern WB → Naef U (1982) 79:355
- Stewart DC → Mazzone P (1987) 97:292-296
- Stille P, Buletti M (1987) Nd-Sr isotopic characteristics of the Lugano volcanic rocks and constraints on the continental crust formation in the South Alpine domain (N-Italy-Switzerland) 96:140-150
- Stille P, Tatsumoto M (1985) Precambrian tholeiitic-dacitic rock suites and Cambrian ultramafic rocks in the Pennine nappe system of the Alps: Evidence from Sm-Nd isotopes and rare earth elements 89:184-192
- Stillman CJ → Javoy M (1986) 92:225-235
- Stöckhert B (1985) Compositional control on the polymorphism (2M, -3T) of phengitic white mica from high pressure parageneses of the Sesia Zone (lower Aosta valley, Western Alps; Italy) 89:52-58
- Stöckhert B, Jäger E, Voll G (1986) K-Ar age determinations on phengites from the internal part of the Sesia Zone, Western Alps, Italy 92:456-470
- Stöckhert B → Hammerschmidt K (1987) 95:393-408
- Stoeser DB → Stacey JS (1983) 84:31
- Stolper E (1982) Water in Silicate Glasses: An Infrared Spectroscopic Study 81:1
- Stolper E → Fine G (1985) 91:105-121
- Stolz AJ, Varne R, Wheller GE, Foden JD, Abbott MJ (1988) The geochemistry and petrogenesis of K-rich alkaline volcanics from the Batu Tara volcano, eastern Sunda arc 96:374-389
- Stolz AJ → Wilkinson JFG (1983) 83:363
- Stone D → Kamineni DC (1983) 83:237
- St-Onge MR → Pattison DRM (1982) 79:394
- Storey M (1981) Trachytic Pyroclastics from Agua de Pau Volcano, Sao Miguel, Azores: Evolution of a Magma Body over 4,000 Years 76:423
- Storey M → Wolff JA (1983) 82:86
- Stosch H-G (1981) Sc, Cr, Co and Ni Partitioning Minerals from Spinel Peridotite Xenoliths 76:166
- Stout JH → Johnston AD (1984) 88:196
- Stout MZ, Crawford ML, Ghent ED (1986) Pressure-temperature and evolution of fluid compositions of Al_2SiO_5 -bearing rocks, Mica Creek, B.C., in light of fluid inclusion data and mineral equilibria 92:236-247
- Stout MZ → Ghent ED (1981) 76:92
- Stout MZ → Ghent ED (1984) 86:248
- Stout MZ → Nicholls J (1982) 79:201
- Stout MZ → Nicholls J (1982) 81:328
- Stout MZ → Nicholls J (1986) 94:395-404
- Strauss KW → Greiffo W (1984) 87:418
- Strickholm P → Merino E (1983) 82:360
- Strong DF → Taylor RP (1981) 77:267
- Stubbs D → Allen AR (1982) 79:319
- Stuckless JS → Zielinski RA (1981) 78:209
- Stumpff EF → Balthaus CG (1986) 94:193-204
- Stumpff EF → Clifford TN (1981) 77:225
- Sturchio NC, Muehlenbachs K (1985) Origin of low- ^{18}O metamorphic rocks from a Late Proterozoic shear zone in the Eastern Desert of Egypt 91:186-195
- Sturchio NC → Sultan M (1986) 93:513-523
- Sugawara Y → Kouchi A (1983) 83:177
- Sultan M, Batiza R, Sturchio NC (1986) The origin of small-scale geochemical and mineralogical variations in a granite intrusion 93:513-523
- Sunagawa I → Kouchi A (1983) 83:177
- Sunagawa I → Kouchi A (1985) 89:17-23
- Sunagawa I → Kouchi A (1986) 93:429-438
- Sutcliffe RH (1987) Petrology of Middle Proterozoic diorites and picrites from Lake Nipigon, Canada 96:201-211
- Suter GF → Griffin WL (1988) 99:143
- Suzuki K → Maruyama S (1982) 81:268
- Sveinbjornsdottir AE, Coleman ML, Yardley BWD (1986) Origin and history of hydrothermal fluids of the Reykjanes and Krafla geothermal fields, Iceland. A stable isotope study 94:99-109
- Tait SR (1988) Samples from the crystallising boundary layer of a zoned magma chamber 100:470-483
- Takahashi E → Bertrand P (1986) 93:165-178
- Takahashi E → Tsuchiyama A (84) 84:345
- Takasugi H → Itaya T (1988) 100:281-290
- Takeuchi K → Wang G-F (1986) 93:9-17
- Taniguchi H (1988) Surface tension of melts in the system $\text{CaMgSi}_2\text{O}_6 - \text{CaAl}_2\text{Si}_2\text{O}_7$ and its structural significance 100:484-489
- Tanner Oliveira MAJ → Sighinolfi GP (1981) 78:263
- Turney J → Weaver BL (1981) 78:175
- Tatsumoto M → Basu AR (1984) 86:35
- Tatsumoto M → Claesson S (1984) 85:244
- Tatsumoto M → Pittingli HS (1984) 85:279
- Tatsumoto M → Smith PE (1987) 97:93-104
- Tatsumoto M → Stille P (1985) 89:164-192
- Taylor HP → McBirney AR (1987) 95:4-20
- Taylor HP Jr → Bickle MJ (1988) 100:399-417
- Taylor HP Jr → Ferrara G (1986) 92:269-280
- Taylor HP Jr → Gregory RT (1986) 93:114-119
- Taylor HP Jr → Gregory RT (1986) 93:124-135
- Taylor HP Jr → Hill RI (1986) 92:351-361
- Taylor HP Jr → Larson PB (1986) 92:146-156
- Taylor HP Jr → Wickham SM (1985) 91:122-137
- Taylor HP Jr → Wickham SM (1987) 95:255-268
- Taylor PN → Kalsbeek F (1985) 89:307-316
- Taylor PN → Kalsbeek F (1986) 93:439-448
- Taylor RP, Strong DF, Fryer BJ (1981) Volatile Control of Contrasting Trace Element Distributions in Peralkaline Granitic and Volcanic Rocks 77:267
- Taylor SR → Jaques AL (1983) 82:154
- Taylor SR → McCulloch MT (1987) 97:183-195
- Taylor WR → Foley SF (1986) 93:48-55
- Taylor WR → Foley SF (1986) 94:183-192
- Tazaki K (1986) Observation of primitive clay precursors during microcline weathering 92:86-88
- Terabayashi M (1988) Actinolite-forming reaction at low pressure and the role of Fe^{2+} -Mg substitution 100:268-280
- Terakado Y, Nakamura N (1984) Nd and Sr isotopic variations in acidic rocks from Japan: significance of upper-mantle heterogeneity 87:407
- Terakado Y, Shimizu H, Masuda A (1988) Nd and Sr isotopic variations in acidic rocks formed under a peculiar tectonic environment in Miocene Southwest Japan 99:1
- Terhart L → Chatterjee ND (1985) 89:273-284
- Teruya J → Toriumi M (1986) 94:54-62
- Thirlwall MF → Dickinson AP (1987) 96:455-464
- Thirlwall MF → Graham AM (1981) 76:336
- Thirlwall MF → Stephens WE (1985) 89:226-238
- Thomas S → Franz G (1986) 92:71-85
- Thompson AB → Le Breton N (1988) 99:226
- Thompson AB → Obata M (1981) 77:74
- Thompson G → Shibata T (1986) 93:144-159
- Thompson PH → Sisson VB (1981) 78:371

- Thompson RN, Dickin AP, Gibson IL, Morrison MA (1982) Elemental Fingerprints of Isotopic Contamination of Hibernian Palaeocene Mantle-Derived Magmas by Archaean Sial 79: 159
- Thompson RN, Fowler MB (1986) Subduction-related shoshonitic and ultrapotassic magmatism: a study of Siluro-Ordovician syenites from the Scottish Caledonides 94: 507-522
- Thompson RN → Dickin AP (1987) 96: 455-464
- Thon A → Furnes H (1982) 79: 295
- Thorpe RS → Venturelli G (1984) 86: 209
- Thurston PC, Fryer BJ (1983) The Geochemistry of Repetitive Cyclical Volcanism from Basalt Through Rhyolite in the Uchi-Coniferation Greenstone Belt, Canada 83: 204
- Thy P (1983) Phase Relations in Transitional and Alkali Basaltic Glasses from Iceland 82: 232
- Thy P (1983) Spinel Minerals in Transitional and Alkali Basaltic Glasses from Iceland 83: 141
- Tieh TT, Ledger EB (1981) Fission Track Study of Uranium in Two Granites of Central Texas 76: 12
- Tindle AG, Pearce JA (1981) Petrogenetic Modelling of in situ Fractional Crystallization in the Zoned Loch Doon Pluton, Scotland 78: 196
- Tingle TN, Aines RD (1986) Beta track autoradiography and infrared spectroscopy bearing on the solubility of CO_2 in albite melt at 2 GPa and 1450°C 100: 222-225
- Tobschall HJ → Klöck W (1986) 93: 273-282
- Todt W → Kröner A (1986) 99: 257
- Tohara T → Onuma K (1983) 84: 174
- Tokonomi M → Enami M (1984) 86: 241
- Tolomeo L → Barbieri M (1986) 99: 485
- Tolomeo L → Pecorello A (1984) 86: 230
- Tompkins LA, Haggerty SE (1985) Groundmass oxide minerals in the Koidu kimberlite dikes, Sierra Leone, West Africa 91: 245-263
- Tonariini S → Ferrara G (1986) 92: 269-280
- Tönges I → Flörke OW (1982) 80: 324
- Toriumi M, Teruya J, Masui M, Kuwahara H (1986) Microstructures and flow mechanisms in regional metamorphic rocks of Japan 94: 54-62
- Tormey DR, Grove TL, Bryan WB (1987) Experimental petrology of normal MORB near the Kane Fracture Zone: 22°-25° N, mid-Atlantic ridge 96: 121-139
- Touret J → Hoefs J (1981) 78: 332
- Treiman AH, Essene EJ (1984) A periclase-dolomite-calcite carbonatite from the Oka complex, Quebec, and its calculated volatile composition 85: 149
- Triboulet C (1983) Unif- and Divariant Equilibria Between Staurolite, Chloritoid, Garnet, Chlorite, Biotite in Medium Pressure Meta-Acidites from Lorient-Concarneau Area (South Brittany, France) 82: 195
- Trommsdorff V, Skippen G (1986) Vapour loss ("Boiling") as a mechanism for fluid evolution in metamorphic rocks 94: 317-322
- Trommsdorff V, Skippen G, Ulmer P (1985) Halite and sylvite as solid inclusions in high-grade metamorphic rocks 89: 24-29
- Trommsdorff V → Evans BW (1981) 76: 301
- Trommsdorff V → Mellini M (1987) 97: 147-155
- Trzcinski WE Jr, Carmichael DM, Helmsstedt H (1984) Zoned sodic amphibole: petrologic indicator of changing pressure and temperature during tectonism in the Bathurst Area, New Brunswick, Canada 85: 311
- Tsuchiyama A (1985) Dissolution kinetics of plagioclase in the melt of the system diopside-albite-anorthite, and origin of dusty plagioclase in andesites 89: 1-16
- Tsuchiyama A (1985) Partial melting kinetics of plagioclase-diopside pairs 91: 12-23
- Tsuchiyama A, Takahashi E (84) Melting kinetics of a plagioclase feldspar 84: 345
- Tsuchiyama A → Kouchi A (1986) 93: 429-438
- Tsutsui M → Hariya Y (1981) 77: 256
- Tubosun IA, Lancelot JR, Rahaman MA, Ocan O (1984) U-Pb Pan-African ages of two charnockite-granite associations from Southwestern Nigeria 88: 188
- Turi B → Ferrara G (1986) 92: 269-280
- Turner NJ → Higgins NC (1986) 92: 248-259
- Turpin L, Maruejol P, Cuney M (1986) U-Pb, Rb-Sr and Sm-Nd chronology of granitic basement, hydrothermal albitites and uranium mineralization (Lagoa Real, South-Bahia, Brazil) 96: 139-147
- Tyler IM, Ashworth JR (1982) Sillimanite-Potash Feldspar Assemblages in Graphitic Pelites, Strontian Area, Scotland 81: 18
- Tyner GN, Smith D (1986) Peridotite xenoliths in silica-rich, potassic latite from the transition zone of the Colorado Plateau in north-central Arizona 94: 63-71
- Ueda A, Itaya T (1981) Microphenocrystic Pyrrhotite from Dacite Rocks of Satsuma-hojima, Southwest Kyushu, Japan and the Solubility of Sulfur in Dacite Magma 78: 21
- Ueda Y → Murata M (1983) 84: 58
- Uliana D → Dal Negro A (1986) 92: 35-43
- Ulmer P → Trommsdorff V (1985) 89: 24-29
- Ungaretti L → Rossi G (1983) 83: 247
- Unger CP → Windom KE (1988) 98: 390-400
- Upton BGJ → Baxter AN (1985) 89: 90-101
- Urano H → Kuroda N (1988) 100: 129-138
- Valencia Herrera J → Pichavant M (1988) 100: 300-324
- Valencia Herrera J → Pichavant M (1988) 100: 325-338
- Valley JW, O'Neill JR (1984) Fluid heterogeneity during granulite facies metamorphism in the Adirondacks: stable isotope evidence 85: 158
- Valley JW → Isaacs AM (1981) 77: 115
- Valley JW → Lamb WM (1987) 96: 485-495
- Valley JW → Lamb WM (1988) 100: 349-360
- Valley JW → Mora CI (1985) 89: 215-225
- Valley JW → Morrison J (1988) 98: 97-108
- VanBreeman O → Dallmeyer RD (1981) 78: 61
- Vance JA → Dungan MA (1983) 82: 131
- Vance JA → Evans BW (1987) 96: 178-185
- Vanek J → Kröner A (1988) 99: 257
- Vaniman DT, Crowe BM, Gladney ES (1982) Petrology and Geochemistry of Hawaiite Lavas from Crater Flat, Nevada 80: 341
- Vanko DA, Bishop FC (1982) Occurrence and Origin of Marialite Scapolite in the Humboldt Lopolith, N.W. Nevada 81: 277
- Vankova V → Kröner A (1988) 99: 257
- Varne R → Stoiz AJ (1988) 98: 374-380
- Vasconcelos MBA → Iyer SS (1984) 85: 95
- Vaughan PJ, Kohstedt DL (1982) Distribution of the Glass Phase in Hot-Pressed Olivine-Basalt Aggregates: An Electron Microscopy Study 81: 253
- Velde B, Medhioub M (1988) Approach to chemical equilibrium in diagenetic chlorites 98: 122-127
- Velde B → Paradis S (1983) 83: 342
- Velde D → Wagner C (1987) 96: 166-191
- Venturelli G, Thorpe RS, Dal Piaz GV, Del Moro A, Potts PJ (1984) Petrogenesis of calc-alkaline, shoshonitic and associated ultrapotassic Oligocene volcanic rocks from the Northwestern Alps, Italy 86: 209
- Verkaeren J → Marcke de Lummen G van (1986) 93: 77-88
- Vetter SK → Fodor RV (1984) 88: 307
- Vezzalini G → Passaglia E (1985) 90: 190-198
- Vidal P → Clauer N (1985) 89: 81-89
- Vidal P → Deniel C (1987) 96: 78-82
- Vidal P → Jahn B (1984) 86: 398
- Vielzeuf D (1983) The Spinel and Quartz Associations in High Grade Xenoliths from Tallante (S.E. Spain) and Their Potential Use in Geothermometry and Barometry 82: 301
- Vielzeuf D, Holloway JR (1986) Experimental determination of the fluid-absent melting relations in the pelitic system. Consequences for crustal differentiation 96: 257-276
- Villa IM → Blanckenburg F von (1988) 100: 1-11
- Villa IM → Del Moro A (1982) 81: 340

- Villement B (1986) Trace element evolution in the Phlegrean Fields (Central Italy): fractional crystallization and selective enrichment 96:169-183
- Vines KJ (1987) Comments on "Ratio correlations and major element mobility in altered basalts and komatiites" by H.R. Rollinson and C.R. Roberts 97:525-526
- Virgo D → Mysen BO (1985) 90:101-106
- Virgo D → Mysen BO (1985) 91:205-220
- Viewanathan K, Harnett O (1986) Lattice expansion and ionic substitution in common pyroxenoids 94:238-244
- Vocke RD Jr, Hanson GN, Grünfelder M (1987) Rare earth element mobility in the Rutina Gneiss, Switzerland 95:145-154
- Vogel TA (1982) Magma Mixing in the Acidic-Basic Complex of Ardnarmurchan: Implications on the Evolution of Shallow Magma Chambers 79:411
- Vogel TA, Younker LW, Wilband JT, Kampmüller E (1984) Magma mixing: the Marsco suite, Isle of Skye, Scotland 87:231
- Volt G → Stöckhert B (1986) 92:436-470
- Vollmer R, Ogden P, Schilling J-G, Kingsley RH, Waggoner DG (1984) Nd and Sr isotopes in ultrapotassic volcanic rocks from the Lausitz Hills, Wyoming 87:359
- Voshage H, Hunziker JC, Hofmann AW, Zingg A (1987) A Nd and Sr isotopic study of the Ivrea zone, Southern Alps, N-Italy 97:31-42
- Voshage H, Sinigoi S, Mazzucchelli M, Demarchi G, Rivalenti G, Hofmann AW (1986) Isotopic constraints on the origin of ultramafic and mafic dikes in the Balmuccia peridotite (Ivrea Zone) 100:261-267
- Waggoner DG → Vollmer R (1984) 87:359
- Wagner C, Velde D, Mokhtari A (1987) Sector-zoned phlogopites in igneous rocks 96:186-191
- Wagner F, Wenk H-R, Kern H, Houtte P van, Esting C (1982) Development of Preferred Orientation in Plane Strain Deformed Limestone: Experiment and Theory 80:132
- Walker D (1986) Melting equilibria in multicomponent systems and liquidus/solidus convergence in mantle peridotite 92:303-307
- Walker D, DeLong SE (1982) Soret Separation of Mid-Ocean Ridge Basalt Magma 79:231
- Walker D, DeLong SE (1984) A small Soret effect in spreading center gabbros 85:203
- Walker D, Jurewicz S, Watson EB (1986) Accumulus dunite growth in a laboratory thermal gradient 99:306
- Walker D, Mullins O Jr (1981) Surface Tension of Natural Silicate Melts from 1,200°-1,500° C and Implications for Melt Structure 76:455
- Walker D → Hekinian R (1987) 96:265-280
- Walker D → Sack RO (1987) 96:1-23
- Walker DA, Cameron WE (1983) Boninite Primary Magmas: Evidence from the Cape Vogel Peninsula, PNG 83:150
- Wall VJ → Bohlen SR (1983) 83:52
- Wall VJ → Bohlen SR (1983) 83:270
- Wall VJ → Clemens JD (1984) 88:354
- Wall VJ → Pownceby MI (1987) 97:116-126
- Wall VJ → Pownceby MI (1987) 97:539
- Walsh JN → Jackson NJ (1984) 87:205
- Walter RC, Hart WK, Westgate JA (1987) Petrogenesis of a basalt-rhyolite tephra from the west-central Afar, Ethiopia 95:462-480
- Walther JV, Orville PM (1982) Volatile Production and Transport in Regional Metamorphism 79:252
- Walther JV, Wood BJ (1984) Rate and mechanism in prograde metamorphism 88:246
- Wang G-F, Banno S (1987) Non-stoichiometry of interlayer cations in micas from low- to middle-grade metamorphic rocks in the Ryoke and the Sanbagawa belts, Japan 97:313-319
- Wang G-F, Banno S, Takeuchi K (1986) Reactions to define the biotite isograd in the Ryoke metamorphic belt, Kii Peninsula, Japan 93:9-17
- Warhus U, Chatterjee ND (1984) Ephesite, $\text{Na}(\text{LiAl})_2(\text{Al}_2\text{Si}_2\text{O}_{10})(\text{OH})_2$. I. Thermal stability and standard state thermodynamic properties 85:74
- Warhus U → Chatterjee ND (1984) 85:80
- Warner RD, Snipes DS, Hughes SS, Steiner JC, Davis MW, Manogian PR, Schmitt RA (1985) Olivine-normative dolerite dikes from western South Carolina: mineralogy, chemical composition and petrogenesis 90:386-400
- Wasserburg GJ → Drach V von (1986) 92:13-34
- Wasserburg GJ → Shaw HF (1987) 96:281-290
- Waters DJ, Moore JM (1985) Kornerupine in Mg-Al-rich gneisses from Namaqualand, South Africa: mineralogy and evidence for late-metamorphic fluid activity 91:369
- Waters DJ, Whales CJ (1984) Dehydration melting and the granulite transition in metapelites from southern Namaqualand, S. Africa 88:269
- Waters FG (1987) A suggested origin of MARID xenoliths in kimberlites by high pressure crystallization of an ultrapotassic rock such as lamproites 95:523-533
- Watson EB (1982) Basalt Contamination by Continental Crust: Some Experiments and Models 80:73
- Watson EB → Green TH (1982) 79:96
- Watson EB → Harrison TM (1983) 84:66
- Watson EB → Jurewicz AJG (1986) 99:176
- Watson EB → Jurewicz AJG (1988) 99:188
- Watson EB → Jurewicz SR (1984) 85:25
- Watson EB → Rapp RP (1986) 94:304-316
- Watson EB → Walker D (1986) 99:306
- Wayne DM, Sinha AK (1986) Physical and chemical response of zircons to deformation 96:109-121
- Weaver BL, Tarney J (1981) The Scourie Dyke Suite: Petrogenesis and Geochemical Nature of the Proterozoic Sub-Continental Mantle 78:175
- Webb SAC, Wood BJ (1986) Spinel-pyroxene-garnet relationships and their dependence on Cr/Al ratio 92:471-480
- Weber C, Barbey P (1986) The role of water, mixing processes and metamorphic fabric in the genesis of the Baume migmatites (Ardèche, France) 92:481-491
- Weber C, Barbey P, Cuney M, Martin H (1985) Trace element behavior during melt-residuum-fluid interaction in the St. Malo migmatitic dome (France) 90:52-62
- Weber W → Heaman LM (1986) 94:82-89
- Wedepohl KH (1985) Origin of the Tertiary basaltic volcanism in the northern Hessian Depression 89:122-143
- Wedepohl KH → Harmon RS (1987) 95:350-369
- Wedepohl KH → Mengel K (1984) 87:389
- Weiblen PW → Day WC (1986) 93:283-296
- Weill DF → Stebbins JF (1982) 80:276
- Weiss D → Duchesne JC (1985) 90:214-225
- Welber PW → Loomis TP (1982) 81:230
- Wen J, Bell K, Blenkinsop J (1987) Nd and Sr isotope systematics of the Oka complex, Quebec, and their bearing on the evolution of the sub-continental upper mantle 97:433-437
- Wendlandt RF → Herzberg CT (1982) 80:319
- Wendt I → Kröner A (1986) 99:257
- Wenk H-R → Kern H (1983) 83:231
- Wenk H-R → Oterdoom WH (1983) 83:330
- Wenk H-R → Wagner F (1982) 80:132
- Wenk HR → Barber DJ (1984) 88:233
- Werding G → Gordillo CE (1985) 90:93-101
- Werneke Chr → Salje E (1982) 79:56
- Wesolowski D → Drummond MS (1986) 93:96-113
- West HB, Garcia MO, Frey FA, Kennedy A (1986) Nature and cause of compositional variation among the alkalic cap lavas of Mauna Kea Volcano, Hawaii 100:383-397
- Westercamp D → Arco Ph d' (1981) 77:177
- Westgate JA → Walter RC (1987) 95:462-480
- Westra L → Schreurs J (1986) 93:236-250
- Westrich HR (1981) F-OH Exchange Equilibria Between Mica-Amphibole Mineral Pairs 78:318
- Whalen JB, Currie KL (1984) The Top-sails igneous terrane, Western New-

- foundland: evidence for magma mixing 67:319
- Whalen JB, Currie KL, Chappell BW (1987) A-type granites: geochemical characteristics, discrimination and petrogenesis 95:407-419
- Whales CJ → Waters DJ (1984) 88:269
- Wheeler J (1987) The significance of grain-scale stresses in the kinetics of metamorphism 97:397-404
- Wheeler GE → Stolz AJ (1988) 98:374-389
- White AJR → Collins WJ (1982) 80:189
- White BS → Boettcher A (1987) 97:297-304
- White WM → Baxter AN (1985) 89:90-101
- Whitley JE → Stephens WE (1985) 89:226-238
- Whitney PR, McLelland JM (1983) Origin of Biotite-Hornblende-Garnet Coronas Between Oxides and Plagioclase in Olivine Metagabbros, Adirondack Region, New York 82:34
- Whitney PR, Olmsted JF (1988) Geochemistry and origin of albite gneisses, northeastern Adirondack Mountains, New York 99:476
- Wickham SM, Taylor HP Jr (1985) Stable isotopic evidence for large-scale seawater infiltration in a regional metamorphic terrane; the Trois Seigneurs Massif, Pyrenees, France 91:122-137
- Wickham SM, Taylor HP Jr (1987) Stable isotope constraints on the origin and depth of penetration of hydrothermal fluids associated with Hercynian regional metamorphism and crustal anatexis in the Pyrenees 95:255-268
- Wickham SM → Bickle MJ (1988) 100:399-417
- Wickman FE, Åberg G, Levi B (1983) Rb-Sr Dating of Alteration Events in Granitoids 83:358
- Wiebe RA, Wild T (1983) Fractional crystallization and magma mixing in the Tugalak layered intrusion, the Main anorthositic complex, Labrador 84:327
- Wiebe RA → Berg JH (1985) 90:226-235
- Wichmann MJ → Wintach RP (1981) 77:207
- Wijbrans JR, McDougall I (1986) $^{40}\text{Ar}/^{39}\text{Ar}$ dating of white micas from an Alpine high-pressure metamorphic belt on Naxos (Greece): the resetting of the argon isotopic system 93:187-194
- Wilband JT → Vogel TA (1984) 87:231
- Wild T → Wiebe RA (1983) 84:327
- Wilkinson JFG, Hensel HD (1988) The petrology of some picrites from Mauna Loa and Kilauea volcanoes, Hawaii 96:326-345
- Wilkinson JFG, Stolz AJ (1983) Low-Pressure Fractionation of Strongly Under-saturated Alkaline Ultrabasic Magma: the Olivine-Melilitite-Nephelinite at Molili, Oahu, Hawaii 83:363
- Williams CT, Floyd PA (1981) The Localized Distribution of U and Other Incompatible Elements in Spilitic Pillow Lavas 78:111
- Williams IS, Claesson S (1987) Isotopic evidence for the Precambrian provenance and Caledonian metamorphism of high grade paragneisses from the Seve Nappes, Scandinavian Caledonides. II. Ion microprobe zircon U-Th-Pb 97:205-217
- Williams IS, Compston W, Black LP, Ireland TR, Foster JJ (1984) Unsupported radiogenic Pb in zircon: a cause of anomalously high Pb-Pb, U-Pb and Th-Pb ages 88:322
- Williams IS → Black LP (1986) 94:427-437
- Willmore LM → Kerrich R (1987) 95:481-498
- Willmore LM → Kerrich R (1987) 97:156-168
- Willmore LM → Kerrich R (1988) 100:555-559
- Wilson CJL → Ahmad R (1981) 76:24
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- Windom KE, Unger CP (1988) Stability of the assemblage albite plus forsterite at high temperatures and pressures with petrologic implications 98:360-400
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- Wintach RP, O'Connell AF, Ransom BL, Wichmann MJ (1981) Evidence for the Influence of f_{CH_4} on the Crystallinity of Disseminated Carbon in Greenschist Facies Rocks, Rhode Island, USA 77:207
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- Wolff JA, Storey M (1983) The Volatile Component of Some Pumice-Forming Alkaline Magmas from the Azores and Canary Islands 82:66
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- Woussen G, Dimroth E, Corriveau L, Archer P (1981) Crystallization and Emplacement of the Lac St-Jean Anorthosite Massif (Quebec, Canada) 76:343
- Wyers GP, Barton M (1986) Petrology and evolution of transitional alkaline-subalkaline lavas from Patmos, Dodecanesos, Greece: evidence for fractional crystallization, magma mixing and assimilation 93:297-311
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- Yardley BWD (1982) The Early Metamorphic History of the Haast Schists and Related Rocks of New Zealand 81:317
- Yardley BWD, Baltatzis E (1985) Retrogression of staurolite schists and the sources of infiltrating fluids during metamorphism 89:59-68
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- Yau Y-C, Anovitz LM, Essene EJ, Peacor DR (1984) Phlogopite-chlorite reaction mechanisms and physical conditions during retrograde reactions in the Marble Formation, Franklin, New Jersey 88:299
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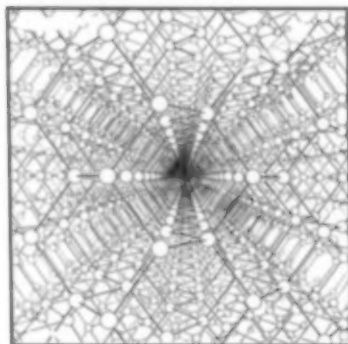
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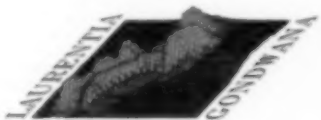
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